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ABSTRACT

TRACE is a system for conducting followup surveys of high school graduates using a stratified random sampling model. Developed and tested in the State of California, the system has been approved as an alternate method that districts may use to obtain data for State-required vocational education reports. Intended for administrators at the school or district level who have decided to use TRACE, the handbook presents detailed instructions and forms needed for implementing the system. Contents of the handbook are organized into the following sections: Background, planning, orientation, staff instructions, data processing, and reproducible materials. Instructions are addressed specifically to the personnel involved, and provide a step-by-step procedure. The final section contains all of the necessary forms, with instructions for their duplication. (RG)

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TRACE

A SYSTEM FOR STUDENT FOLLOW-UP

MANAGEMENT HANDBOOK

This Handbook was produced by
The Santa Barbara County Schools
Lorenzo Dall'Armi, Superintendent

in cooperation with

The Vocational Education Section of the
California State Department of Education

VT 103 556

U.S. DEPARTMENT OF HEALTH,
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How to use the TRACE MANAGEMENT HANDBOOK

This Management Handbook is prepared on the assumption that it is to be used by a responsible administrator who has decided to adopt the TRACE system. It includes a brief background on TRACE and specific procedures for TRACE implementation. Components of the handbook are:

- A **Planning** section which assists in relating responsible personnel to the tasks to be accomplished in TRACE.
- A **TRACE Calendar** which shows the typical time periods for the accomplishment of the tasks required for TRACE.
- An **Orientation** section which provides a brief overview of TRACE for students and staff.
- A **Staff Instructions** section which provides specific instructions to responsible staff for the accomplishment of TRACE.
- **Computer Programs and Test Data** - All of the programs and test data necessary to permit qualified computer-center personnel to handle the sampling and data processing phase of TRACE.
- **Example Displays** - Examples of computer-generated reports produced by TRACE.
- **Reproducible Materials** - Camera-ready master copies of materials which should be reproduced in sufficient number to be used to accomplish TRACE.

This handbook is provided in loose-leaf form to facilitate the removal and reproduction of materials which the administrator may wish to distribute to responsible personnel. However, the original of all materials should be retained in the handbook for ready reference.

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I.
TRACE BACKGROUND

The Vocational Education Section of the California State Department of Education has sponsored a three-year research and development effort to investigate the uses of modern sampling techniques in the follow-up of high school graduates. During the research phase the State Department of Education, in cooperation with the Santa Barbara County Schools and Human Factors Research, has developed a validated follow-up system. This system has been tested in 30 districts in the State of California, and it has been approved by the Vocational Education section as an alternate method that districts may use to obtain data for the required VE-45 Vocational Education report. With this sampling approach in follow-up studies there is no need to obtain information from all members of the graduating class; rather, data are obtained from representative graduates and inferences are made from their responses and projected to the entire class. Since only a relatively small number of graduates need to be contacted the costs are reduced. Because the selected sample of graduates is representative of the class, valid inferences and conclusions can be drawn.

The Follow-up system, TRACE, uses a stratified-random sampling model. Such a model has long been employed in market research and national polls. It insures that a selected sample is representative of a given graduating class with respect to the specific variables that differentiate among the various segments of that class. Prior to selecting a sample, the graduating class is stratified or divided into sub-groups identified by combinations of levels of the variables. From these sub-groups random samples are selected; the size of the samples selected for each sub-group is proportional to the size of the subgroup in the graduating class. Reports pertinent to the total class are generated from information derived from questionnaires sent to the sample members.

The details of obtaining the basic data and the computer programs to properly weight the segments of the sample were carefully worked out during the research and development phase of TRACE. After the field test the procedures were modified as necessary and refined for ease of operation. The procedures have been incorporated in this TRACE Management Handbook. The handbook is directed to the responsible administrator, at the school or district level, who has decided to use the TRACE system. Details for planning and implementing the system are included in the handbook.

II.
PLANNING

Successful implementation of the TRACE follow-up system requires careful advance planning and coordination of efforts. Consideration must be given to system requirements (facilities, services, manpower) and their availability at the school and district levels. Consideration may be given to the possibility or need for using outside services.

Manpower needs are dictated in part by the size of the school district and the extent that outside services will be used. Of primary importance is the coordination of all aspects of the project including in-house personnel, in-house facilities, and outside services. A form has been developed to assist in planning and monitoring TRACE in your school or district.

The following is a general summary of facilities, materials, and personnel requirements of TRACE. Also included is a planning form, instructions for using it and a completed example.

A. FACILITIES AND MATERIALS

Following are the facilities and materials that are needed to implement TRACE. Each item is discussed in detail in subsequent sections of this manual. In most cases, you may use in-house or outside facilities presently available for normal school operations.

FACILITIES	MATERIALS
1. Electronic data processing facilities including keypunching equipment	1. School/District letterhead (for cover letters)
2. Duplication/printing facilities	2. Business size (No. 10) mailing envelopes
3. Mailing facilities	3. Business reply envelopes (No. 9 size)
4. Telephone facilities	4. Pressure-sensitive labels for computer printing
	5. Mail-out questionnaires (Reproduced from model in this handbook)
	6. Telephone interview questionnaires (Reproduced from model in this handbook)

7. Coding and Keypunching Forms (Reproduced from models in this handbook)
8. Graduate Roster Forms (Reproduced from model in this handbook)

B. PERSONNEL

Administrator - The Administrator approves the TRACE follow-up system, introduces TRACE at an administrative council meeting, selects the follow-up coordinator, provides for financial support and general management, and involves subordinate administrators as necessary.

TRACE Coordinator - The TRACE coordinator will have the primary responsibility for coordinating the various TRACE activities, personnel, and facilities. This individual should therefore be thoroughly familiar with TRACE and be able to answer questions that might arise. This is a special assignment from the regular staff and does not require an additional position. The Coordinator should review all sections of this Management Handbook thoroughly.

Vocational Coordinator - The Vocational Coordinator will identify and note the vocational program(s) completed by each graduate. He will also make judgments concerning VE-45 Report entries. Specific instructions for the Vocational Coordinator start on page **24**.

Guidance Personnel - Guidance Personnel will be responsible for identifying Sex, Ethnic/Racial Background, Grade Point Average, and High School Program of each graduate. Their efforts should be coordinated with those of the Vocational Coordinator. Specific instructions start on page **29**.

Data Processing Personnel - Data processors will have a major role in the project. They will have responsibility for examining the computer programs, evaluating the capabilities of their data processing equipment, coordinating TRACE requirements with existing school or district educational data processing applications and implementing the programs. They will perform the data processing. Specific instructions for the Data Processing Staff start on page **41**.

Secretarial/Clerical Personnel - Clerical personnel will assist in the preparation of the Graduate rosters, prepare the cover letters, conduct the questionnaire mail-outs, and maintain records of respondents and non-respondents. Specific instructions for secretarial/clerical personnel start on page **31**.

Telephone Interviewers - Telephone interviewers will contact graduates who do not return questionnaires. The interviewers must be able to establish good rapport with the interviewee and obtain accurate responses. Specific instructions for interviewers start on page **37**.

Coders - Coders transpose the responses to questionnaire items into computer-processable form. In most cases, the transposition is straightforward and requires no decision-making by the coder; in other cases, where the questionnaire item is open-ended, the coder will need to exercise some judgment in translating responses into code categories. Specific instructions for the coder start on page **55**.

Keypunchers - Keypunchers will punch cards from lists, such as a graduate roster using card-format guides, or directly from keypunch sheets. Specific instructions for the keypuncher start on page **60**.

C. TRACE PLANNING FORM

All of the tasks required to implement TRACE have been prelisted in the left section of the Planning Form, Figure A. The right section indicates the outcomes or results of each task. To plan for TRACE, you must do the following:

1. In the space marked Time (in weeks), indicate the total span of time required to complete the task. Some tasks may be spread over longer periods of time than others even though the number or hours required to accomplish them may be the same. Refer to the calendar (page **10-13**) of this Management Handbook to assist you in estimating the time span required to complete a task.
2. In the section marked Personnel, first enter in the diagonal spaces at the top of the section the names of all the people who will be involved in the project. Then estimate the number of hours that each person needs to schedule for the accomplishment of that particular task. Enter that time in hours in the intersects below each person's name. If you do not have all of the required personnel and facilities within

your district, you may be able to locate outside services which which can perform some of the required tasks. If these services are available and you desire to use them, check the intersects under Outside Services Available. Next, total the man-hours required for each task by adding the number of hours in each row. Place the total number of man-hours required under the column marked Total Man-hours per task.

3. The total assigned man-hours for each person can be determined by adding the number of hours in the column under that person's name. The total of the numbers on the bottom row should equal the total of the numbers under the "Total Man-hours Per Task" column. When a task is assigned to a responsible individual, a check mark should be placed in the "Assigned" column. Once a task is in progress a check mark should be made under that column. When a task is completed it should be checked off in the "Completed" column. The checks provide a quick reference to the status of a task at a given time.

To demonstrate how you may use your TRACE planning form, an example form for a hypothetical high school graduating class of 500 students which resulted in a sample of 165 students has been provided. (See page 7.) An assumption has been made that computer facilities are available in the district and TRACE software is prepared for use with the district equipment. Your figures must be adjusted to match your own school and district circumstances. The size of the sample will vary widely because of the composition of the graduating class. You should organize your follow-up on the form before proceeding to Staff Orientation.

FIGURE A

TRACE PLANNING FORM

TASK	TIME (IN WEEKS)	Administrator(s)	TRACE Coordinator	Vocational Coordinator	Guidance Personnel	Data Processing	Secretarial Clerical	Telephone Interviewers	Coders		Outside Services Available	Total Man Hours Per Task	ASSIGNED	IN PROGRESS	COMPLETED	RESULTS
1. CONDUCT STAFF ORIENTATION	◆	2	4	2	2	2	4					16				STAFF UNDERSTANDING OF TRACE SYSTEM
*2. CONDUCT STUDENT ORIENTATION	✱	2	2		3		1					8				STUDENT AWARENESS OF FOLLOW-UP
3. REPRODUCE ALL NECESSARY FORMS AND DOCUMENTS	—						4					4				QUESTIONNAIRES, COVER LETTERS ROSTER, CODING AND TELEPHONE INTERVIEW FORMS
4. FILL OUT GRADUATE ROSTER FOR ENTIRE GRADUATING CLASS	—			2	3		24					29				COMPLETED ROSTER
5. KEYPUNCH AND VERIFY ROSTER DATA	◆					5						5				COMPUTER-READY GRADUATE DATA (CARD DECKS)
6. PERFORM COMPUTER SELECTION OF STRATIFIED RANDOM SAMPLES	◆					0.5						0.5				STATISTICAL PROFILE OF GRADUATES
7. KEYPUNCH MAILING DATA AND COMPUTER PROCESS	◆					3						3				MAILING LABELS AND MASTER NAME LISTS FOR SAMPLE
8. PERFORM FIRST MAIL-OUT TO SELECTED SAMPLES	◆						4					4				APPROXIMATELY 35% RESPONSE
9. ANNOTATE MASTER NAME LIST USING RETURNED QUESTIONNAIRES	—						2					2				RAW DATA AND UPDATED NAME LIST
10. PERFORM SECOND MAIL-OUT TO NON-RESPONDENTS	◆						2					2				APPROXIMATELY 25% RESPONSE
11. ANNOTATE MASTER NAME LIST USING RETURNED QUESTIONNAIRES	—						1					1				UPDATED LIST AND ADDITIONAL RAW DATA
12. CONDUCT TELEPHONE INTERVIEWS OF NON-RESPONDENTS	—							10				10				APPROXIMATELY 20% RESPONSE
13. CODE QUESTIONNAIRE AND TELEPHONE INTERVIEW DATA	—								20			20				CODED SURVEY DATA
14. KEYPUNCH AND VERIFY SURVEY DATA	—					4						4				COMPUTER-READY SURVEY DATA (CARD DECKS)
15. COMPUTER PROCESS - SURVEY DATA (Set up through print-out)	◆					1						1				COMPUTER PRINTOUTS OF GRADUATE INFORMATION
16. ANNOTATE VOCATIONAL GRADUATE LISTING	—			2								2				COMPLETE GRADUATE DATA
17. CODE KEYPUNCH AND COMPUTER PROCESS VE-45 DATA	—					1.5			1			2.5				COMPUTER PRINTOUT VE-45
		4	6	6	8	17	42	10	21			114	Total Man Hours Per Position			

*Student Orientation is conducted at any time after Staff Orientation and prior to graduation of the senior class.

TRACE PLAN

TASK	TIME (IN WEEKS)
1. CONDUCT STAFF ORIENTATION	
2. CONDUCT STUDENT ORIENTATION	
3. REPRODUCE ALL NECESSARY FORMS AND DOCUMENTS	
4. FILL OUT GRADUATE ROSTER FOR ENTIRE GRADUATING CLASS	
5. KEYPUNCH AND VERIFY ROSTER DATA	
6. PERFORM COMPUTER SELECTION OF STRATIFIED RANDOM SAMPLES	
7. KEYPUNCH MAILING DATA AND COMPUTER PROCESS	
8. PERFORM FIRST MAIL-OUT TO SELECTED SAMPLES	
9. ANNOTATE MASTER NAME LIST USING RETURNED QUESTIONNAIRES	
10. PERFORM SECOND MAIL-OUT TO NON-RESPONDENTS	
11. ANNOTATE MASTER NAME LIST USING RETURNED QUESTIONNAIRES	
12. CONDUCT TELEPHONE INTERVIEWS OF NON-RESPONDENTS	
13. CODE QUESTIONNAIRE AND TELEPHONE INTERVIEW DATA	
14. KEYPUNCH AND VERIFY SURVEY DATA	
15. COMPUTER PROCESS - SURVEY DATA (Set up through print-out)	
16. ANNOTATE VOCATIONAL GRADUATE LISTING	
17. CODE KEYPUNCH AND COMPUTER PROCESS VE-45 DATA	

NING FORM

PERSONNEL														
Administrator(s)	TRACE Coordinator	Vocational Coordinator	Guidance Personnel	Data Processing	Secretarial Clerical	Telephone Interviewers	Coders		Outside Services Available	Total Man Hours Per Task	ASSIGNED	IN PROGRESS	COMPLETED	RESULTS
														STAFF UNDERSTANDING OF TRACE SYSTEM
														STUDENT AWARENESS OF FOLLOW-UP
														QUESTIONNAIRES, COVER LETTERS ROSTER, CODING AND TELEPHONE INTERVIEW FORMS
														COMPLETED ROSTER
														COMPUTER-READY GRADUATE DATA (CARD DECKS)
														STATISTICAL PROFILE OF GRADUATES
														MAILING LABELS AND MASTER NAME LISTS FOR SAMPLE
														APPROXIMATELY 35% RESPONSE
														RAW DATA AND UPDATED NAME LIST
														APPROXIMATELY 25% RESPONSE
														UPDATED LIST AND ADDITIONAL RAW DATA
														APPROXIMATELY 20% RESPONSE
														CODED SURVEY DATA
														COMPUTER-READY SURVEY DATA (CARD DECKS)
														COMPUTER PRINTOUTS OF GRADUATE INFORMATION
														COMPLETE GRADUATE DATA
														COMPUTER PRINTOUT VE-45
									▨		Total Man Hours Per Position			

SEPTEMBER (or First Month)

WEEK 1	**M** Reproduce Graduate Roster forms (See page 175) Conduct Staff Orientation (See page 15)	**T**
WEEK 2	**M** Perform computer selection of stratified random samples (See page 44) Keypunch mailing data and computer process (See page 60)	**T** Perform first mailout to selected samples (See page 34)
WEEK 3	**M** Responses to the first mailout will start coming in	**T**
WEEK 4	**M**	**T** Perform second mailout to nonrespondents (See page 34)
WEEK 5	**M**	**T**

ANNOTATE MASTER NAME LIST

W	**Th** Reproduce survey forms (See page 176)	**F** Keypunch and verify roster data (see page 60)

FILL OUT GRADUATE ROSTER FOR PREVIOUS YEAR'S GRADUATING CLASS (SEE PAGE 31)

W	**Th**	**F**

W	**Th** Check to see that all respondents are checked on the master name list	**F**

ANNOTATE MASTER NAME LIST USING RETURNED QUESTIONNAIRES

CODE QUESTIONNAIRE DATA (SEE PAGE 55)

W	**Th**	**F**

CODE QUESTIONNAIRE DATA

ANNOTATE MASTER NAME LIST USING RETURNED QUESTIONNAIRES

W	**Th** Make sure all respondents have been checked on the master name list	**F**

CODE QUESTIONNAIRE DATA

USING RETURNED QUESTIONNAIRES

OCTOBER (or Second Month)

WEEK 1	**M** PERFORM TELEPHONE INTERVIEWS CODE QUESTIONNAIRE AND	**T**
WEEK 2	**M** KEYPUNCH AND VERIFY SURVEY DATA	**T**
WEEK 3	**M**	**T**
WEEK 4	**M** Start using TRACE printouts for educational planning and reporting purposes	**T**
WEEK 5	**M**	**T**

W OF NON–RESPONDENTS (SEE PAGE 37) TELEPHONE INTERVIEW DATA KEYPUNCH AND VERIFY SURVEY DATA (SEE PAGE 60)	**Th**	**F**
W Perform computer processing of survey data (See page 41)	**Th** ANNOTATE VOCATIONAL GRADUATE LISTING (SEE PAGE 24)	**F**
W CODE, KEYPUNCH, AND COMPUTER PROCESS. COMPLETE GRADUATE DATA	**Th** Sign and submit VE-45 to State not later than the first of November	**F**
W	**Th**	**F**
W	**Th**	**F**

III

ORIENTATION

A. STAFF ORIENTATION

After the district has decided to implement TRACE and the initial planning has been completed, the Superintendent (or designate) should gather together the personnel who will be involved and provide them with a brief overview of TRACE's philosophy and operation. This can be done by using the TRACE brochure which you should have received prior to requesting this handbook, the TRACE planning form which outlines the tasks and results for implementing TRACE, and the sequential steps listed below. Discuss individual tasks briefly, indicating the person who will be assigned the prime responsibility and others who may have additional responsibility for the accomplishment of each task. Point out the span of time and number of hours you have allocated each task on the planning form.

After completion of the overview orientation, each person involved in TRACE should be provided with a packet of materials specifying the duties and responsibilities of that person. The packet should include appropriate instruction sheets from Section IV, TRACE Staff Instructions (page 22) supplemented by copies of other materials if necessary. Original instructions and materials should be retained in the handbook for future reference.

The following is a list of the major tasks that will need to be completed. Each task statement includes a descriptive title of the personnel who are usually assigned to accomplish the task.

Conduct Staff Orientation - This is primarily the responsibility of the administrator who elected to implement TRACE. The responsibility may be delegated to the follow-up coordinator, if necessary. Whoever accomplishes the staff orientation should have thoroughly reviewed the complete TRACE Management Handbook.

Conduct Student Orientation - Student orientation is the responsibility of the TRACE coordinator and should be accomplished in the Spring prior to the close of school. If you are implementing TRACE in the Fall for the first time, it will be possible to obtain good results without prior student orientation; however, it should definitely be accomplished in the Spring for future classes. The student orientation section of the TRACE Management Handbook provides suggestions for specific items to be covered during the orientation.

Reproduce All Necessary Forms and Documents - This task is normally the responsibility of the secretary or clerical personnel. Masters of the forms to be reproduced will be found in the Reproducible Materials section of this Management Handbook and the approximate number to be reproduced is indicated there. Some schools have found it more effective to have these forms reproduced by an outside vendor.

Fill Out Graduate Roster for the Entire Graduating Class - This task is actually accomplished by the secretarial/clerical personnel, but it should be supervised and monitored by guidance counseling personnel, assisted by the vocational coordinator. Specific information required for the roster is included in the instruction sheets for the guidance counselor and also in the instruction sheets for the secretarial/clerical personnel. It is essential that the secretarial/clerical personnel have available to them all the information required in the roster. Part of the Graduate Roster may be completed by Data Processing, if the school or district has student records maintained by Data Processing.

Keypunch and Verify Roster Data - The completed Graduate Roster is forwarded to the data processing center for keypunching and verification. Instructions about fields and columns to be punched are indicated in the instructions to the keypunch operator. Some schools and/or districts have secured outside services for all or part of their computer operations. In any case, speed and accuracy are essential in the performance of this task.

Perform Computer Selection of Stratified Random Samples - This is a computer-driven task performed by data processing personnel using programs to be found under the computer programs section of this Management Handbook. If adequate computer facilities do not exist within your district, it may be necessary to obtain outside services to accomplish this task.

Keypunch Mailing Data and Computer Process - Additional data for graduates selected as sample members must be keypunched to provide mailing materials. Formats and procedures are included in the keypunch operator's instruction sheet.

Perform First Mail-out to Selected Samples - After the computer has generated the mailing labels and a master name list, the clerical personnel fix the labels to questionnaires and to the envelopes.

Annotate Master Name List Using Returned Questionnaires - As the questionnaires are returned, the clerical personnel check the respondent's name off the master list. Questionnaires are sent to data processing for coding and keypunching.

Perform Second Mail-out to Non-Respondents - The second mail-out is also accomplished by the clerical personnel using the same procedure as for the first mail-out.

Annotate Master Name List Using Returned Questionnaires - The master name list is annotated by clerical personnel using the same procedures as used in the first mailing.

Conduct Telephone Interviews of Non-Respondents - Those members who do not respond to either first or second mailing are contacted by telephone. This responsibility may be assigned to the clerical personnel within your organization or contracted to outside services. Instructions for accomplishing the telephone interview are included with the Reproducible Materials section of this Management Handbook and should be reproduced in quantity to provide a set of instructions for each person performing this task. The total number of graduates who responded either by returning the first or second questionnaire or were contacted by telephone, should equal at least 80% of the total sample. The total number of graduates in the sample may be determined by counting the number of graduates for whom mailing labels were produced by data processing.

Code, Keypunch, and Computer Process All Data - This is the responsibility of data processing personnel and complete instructions are included in the computer programs section of this handbook. The results are printouts of several listings which are illustrated in the sample display section and a completed, signature-ready VE-45 which is acceptable to the Vocational Education Unit of the California State Department of Education.

B. STUDENT ORIENTATION

Orientation of students about the purpose of a follow-up survey results in a greater number of students who respond. Following are some recommended procedures and topics for discussion that have been found to be useful in conducting effective orientations to follow-up studies for graduating classes:

Procedures

1. Staff members conducting orientation to follow-up should understand and believe in the need for collecting information from students who have graduated, and must project this need to students.
2. Although small groups are recommended for the orientation, the constraints of schedules during the last several weeks of school may require large group presentations.
3. The orientation should be brief, factual, and allow time for students to ask questions.

Topics

1. High schools are continuously trying to improve what they do for students.
2. Schools maintain and/or change their programs as a result of self-examination.
3. Schools need information from graduates about how the school helped them and what the graduates wish school had done for them.

4. Graduates can provide information about their school from an adult perspective, i.e., from the world of work, further education, homemaking, and everyday living needs of an adult.
5. Graduates are one of the best sources of information about the current and relevant needs of adult life that are or are not, (but should be) included in high school programs.
6. Information provided by graduates, if it is to be useful for making decisions about school programs and procedures, must be honest.
7. Opinions and statements of graduates should be open, frank, and honest, and the individual graduate's responses will be kept strictly confidential.
8. Information provided by graduates will be used and not merely collected and filed.
9. When a sampling method of follow-up is used, the responsibility of a graduate to respond to a questionnaire that may be received is extremely important because that individual represents a group of former students.

IV

TRACE STAFF INSTRUCTIONS

IV

TRACE STAFF INSTRUCTIONS

This section of the handbook contains the instructions for each of the staff members assigned to conduct a part of TRACE, except data processing personnel. Instructions for data processing personnel are included in Section V starting on page 41.

A. INSTRUCTIONS FOR THE TRACE COORDINATOR

Your responsibilities are to coordinate TRACE activities, including the sequence of events, and to ensure that proper procedures are followed by all personnel concerned. Read the entire TRACE Management Handbook thoroughly to make sure that you understand the overall concept of TRACE and the special responsibilities of the staff.

You must make sure that the graduating class receives the Student Orientation prior to the end of school. You may wish to schedule small group meetings or conduct the orientation at an assembly. The Guidance personnel may provide assistance at small group meetings.

Use the TRACE planning form and the TRACE Calendar as a guide in monitoring progress. Make sure that all personnel have the instructions and materials which they need to accomplish their assigned tasks.

If a modification of procedures becomes necessary because of your local circumstances, make sure that the responsible administrator is aware of the changes and their impact on the local TRACE schedule and results.

B. INSTRUCTIONS FOR THE VOCATIONAL COORDINATOR

1. You will be responsible for defining the following:
    a. Each vocational program offered by your district or school, in terms of specific courses that constitute each program.
    b. The amount of work or number and/or name of courses that are required for completion of each vocational program in your school or district.

2. You will provide the program definition information to the guidance person for use in completing the Graduate Roster. Or, you may provide the guidance person with a list of Vocational Education graduates indicating the vocational programs completed by each. You will also be responsible for identifying each graduate who has been enrolled in a Vocational Education Program for the Disadvantaged or Handicapped and giving information to the guidance person.

3. You will provide vocational program identification information for data processing to generate the VE-45 report. After the sample of graduates to be followed up has been selected by data processing, obtain from data processing the listing of Graduating Class and Sample Comparisons for Vocational Programs (Display 3b, page 160) for each school in your district. Using a form with column headings as shown in Figure B (page 27), list the State Vocational program code

number for each different program offered in your district in the appropriate column. Print the title of the programs as you want them to appear on the VE-45 report. Assign a two-digit district code number to each program, beginning with 01, 02, and so on, until every program has a district code number. From the listings obtained from data processing, add the number of males at each school completing each program and enter the total under the column "No. Completing Program" --Males. Do the same for the females completing each program.

Using the same method that you have used in previous years determine the total number of males and females who left each program with marketable skills prior to completion, and enter those totals under the "Left Early" columns.

Give the completed form to the Data Processing manager.

4. You will receive from data processing the vocational program identification information in the format shown in Display 7, page 169. Check to ensure that the State program codes and titles are correct and that the numbers of males and females indicated as completing and leaving each program are accurate. Make whatever corrections are necessary on this form and return it to data processing.

5. You will also receive from data processing a listing of graduates who have completed more than one Vocational Education Program or who are employed full time or both. Figure C (page 28), shows the format in which the information will be presented. Note that the vocational programs are identified

by district codes. You have two tasks to perform:

a. For all graduates who have completed more than one program, select the one program to be reported on the VE-45 form (the VE-45 requires an unduplicated count). To assist you in this judgment, the graduate's status and his job title or school major are given if available. Encircle the one program you want identified with a given graduate, as shown in the examples in Figure C, page 28.

b. For all graduates who are working full time, determine the relatedness of their occupations to their high school programs. In the column headed "Your judgment of relatedness" print one of three terms for each graduate working full time: "specific" (trained for), "related," or "unrelated." To assist you in this judgment, in addition to the job title, the graduate's own judgment of relatedness is given. If your judgment agrees with the graduate's, simply place a check mark (✓) in the "relatedness" column; if your judgment disagrees, line out the graduate's judgment and print your judgment in the column. Figure C, page 28, shows examples of these judgments.

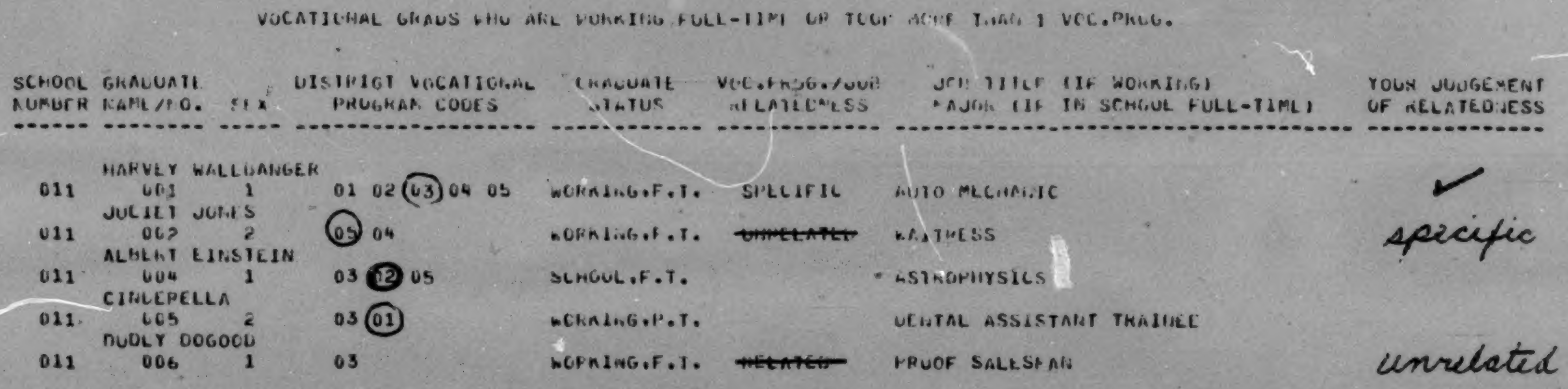
Return this form also to data processing. The production of the VE-45 report cannot be completed until these forms are returned to data processing. Please correct and return them as soon as possible.

VOCATIONAL PROGRAM IDENTIFICATION (EXAMPLE)

DISTRICT CODE	VOCATIONAL PROGRAM CODE	VOCATIONAL PROGRAM TITLE	NO. COMPLETING PROGRAM		LEFT EARLY WITH SKILLS	
			MALES	FEMALES	MALES	FEMALES
01	07/0303/00	Nursing Assistance (Aide)	40	80	2	10
02	17/0399/00	Automotive Services	100	30	15	4
03	17/0999/00	Commercial Photog. Occ.	500	300	24	18
04	17/1300/00	Drafting	300	200	6	1
05	17/9900/00	Trade and Industrial Occ.	100	100	7	11

FIGURE B

VOCATIONAL PROGRAM IDENTIFICATIONS



VOCATIONAL GRADS WHO ARE WORKING FULL-TIME OR TOOK MORE THAN 1 VOC.PROG.

SCHOOL NUMBER	GRADUATE NAME/NO.	SEX	DISTRICT VOCATIONAL PROGRAM CODES	GRADUATE STATUS	VOC.PROG./JOB RELATEDNESS	JOB TITLE (IF WORKING) MAJOR (IF IN SCHOOL FULL-TIME)	YOUR JUDGEMENT OF RELATEDNESS
011	HARVEY WALLBANGER 001	1	01 02 [✓ 03] 04 05	WORKING.F.T.	SPECIFIC	AUTO MECHANIC	✓
011	JULIET JONES 002	2	[✓ 05] 04	WORKING.F.T.	~~UNRELATED~~	WAITRESS	specific
011	ALBERT EINSTEIN 004	1	03 [✓ 12] 05	SCHOOL.F.T.		* ASTROPHYSICS	
011	CINDERELLA 005	2	03 [✓ 01]	WORKING.P.T.		DENTAL ASSISTANT TRAINEE	
011	DUDLY DOGOOD 006	1	03	WORKING.F.T.	~~RELATED~~	PROOF SALESMAN	unrelated

FIGURE C
VOCATIONAL COORDINATOR ANNOTATIONS

C. INSTRUCTIONS FOR GUIDANCE PERSONNEL

Your responsibility is to make the student files available to the clerical personnel who will enter student data into the Graduate Roster. You should check with your existing Data Processing Unit, if any, for student data which may be available. For example, a printout of names and addresses of students will simplify the preparation of the Graduate Roster. Additional information may also be available. The clerical personnel must have access to all of the following information on each graduate:

Name
Address
City
Zip
Phone number
Parent's name
Sex
Ethnic/racial background
GPA
Years in the school
High school program (college prep, general, or vocational)

Students who have completed a vocational program must also have entered for them the code number of the program from the Codes and Titles for Vocational Education Instructional Programs if it is a State sponsored program. The Vocational Coordinator will provide you with a list of courses that constitute specific vocational programs or with a list of vocational students and the programs that each student has completed. If the Vocational Coordinator provides a list of courses that constitute specific vocational programs, the guidance personnel must brief the clerical personnel on the following:

1. The exact location in school records where the vocational courses have been entered.
2. The Vocational Education code numbers that must be assigned to each program that has been completed.
3. The location on the Graduate Roster where the codes are to be entered.

Students who have completed one or more vocational program(s) shall be coded as vocational students regardless of other programs (college prep or general) they may have completed. (Note: Be certain that the Vocational Coordinator identifies those students enrolled in designated Vocational Education Programs for the disadvantaged and assign to each of them the Program Code 3 + 99-2000. Also, be certain to have the Vocational Coordinator identify those students enrolled in designated Vocational Education Programs for the handicapped, and assign to them the Program Code 3 + 99-1000.)

You should "spot check" the Graduate Roster against the student records to insure that proper procedures are being utilized in filling out the Graduate Roster.

You will send the completed Graduate Roster(s) to the TRACE Coordinator.

D. INSTRUCTIONS FOR SECRETARIAL/CLERICAL PERSONNEL

You will play a major role in the implementation of TRACE. Direction and guidance will be provided by the TRACE Coordinator and guidance personnel, but the actual performance of the following tasks will be your responsibility.

1. Reproduce Materials - As quickly as possible after you are informed that TRACE is to be implemented, reproduce the forms from the Reproducible Materials Section of this handbook. Start with the Graduate Roster. This is the first form to be used. The other forms and documents should be reproduced as needed. Reproducing all the forms at the same time may be more convenient for you. The number of each form to be reproduced is indicated in the Reproducible Materials Section (page 172).

2. Prepare Graduate Roster - You must make a complete entry on the Graduate Roster for each member of the class. The guidance person and Vocational Coordinator will provide you with all the student information you need. The information may be on computer printouts or in student folders, or mixed. In any case, unless you are instructed otherwise, follow the sample roster on Page 33 (Figure D). Be sure to include all of the information required. Missing data will invalidate the entry.

Note that the top of the roster form has space for the name of your school, school district, and space for entering the page number and total number pages in the Graduate Roster. The first section shows the information which is entered for each student. For example, the student's name is Sam P. Adams; he lives at 8703 20th Avenue in Arbor, California; his Zip Code is 90001; telephone number (715) 968-1071; and his father's name is John Q. Adams. His graduate number is 001. (Assign a number to each student; assign 001 to the first student, 002 to the second student, etc. Keep all numbers in sequence.) Now look at the codes at the bottom of the sheet. Sam is a male so he gets Code 1. Sam is Caucasian so he has a 2 entered for the ethnic code. His grade point average is somewhere between .0 and 1.9 so a 1 has been entered on the roster. He has spent two years in your high school so a 2 has been entered, and he has completed two vocational education programs. A 3 has been entered to designate that he is a vocational student, and the codes for the two programs have been entered following the 3. (The vocational education codes for State funded programs are found in the State document, Codes and Titles for Vocational Education Instructional Programs. The code should be obtained from the Vocational Education Coordinator if it is not already in the student's records.) If the vocational

FIGURE D

GRADUATE ROSTER

School	District	Page
ARBOR H.S.	ARBOR UNIFIED	1 of 1

Grad's name: SAM P ADAMS
8703 20 AVE
City: ARBOR
State: CA
Zip code: 90001
Phone no.: (715)968-1071
Parent's name: JOHN Q ADAMS

Grad no.	Sex	Eth.	GPA	Yrs.	Program(s)
001	1	2	1	2	3+0702 3+090201 + + +

Grad's name: ROBERT GOMEZ
1AC SYLVAN DRIVE
City: ARBOR
State: CA
Zip code: 90001
Phone no.: (715)967-7065
Parent's name: FRANK GOMEZ

Grad no.	Sex	Eth.	GPA	Yrs.	Program(s)
002	1	4	2	2	2+ + + + +

Grad's name: CRAIG ARAKI
3714 AMALFI WAY
City: ARBOR
State: CA
Zip code: 90002
Phone no.: (715)968-7513
Parent's name: THOMAS ARAKI

Grad no.	Sex	Eth.	GPA	Yrs.	Program(s)
003	1	3	2	4	3+ + + + +

Grad's name: NANCY K SMITH
175 MILPAS
City: ARBOR
State: CA
Zip code: 90002
Phone no.: (715)967-1213
Parent's name: NEIL R SMITH

Grad no.	Sex	Eth.	GPA	Yrs.	Program(s)
004	2	1	3	3	1+ + + + +

CODES

SEX
- Male - 1
- Female - 2

ETHNIC
- Black - 1
- Caucasian - 2
- Oriental - 3
- Spanish Surname - 4
- Other - 5

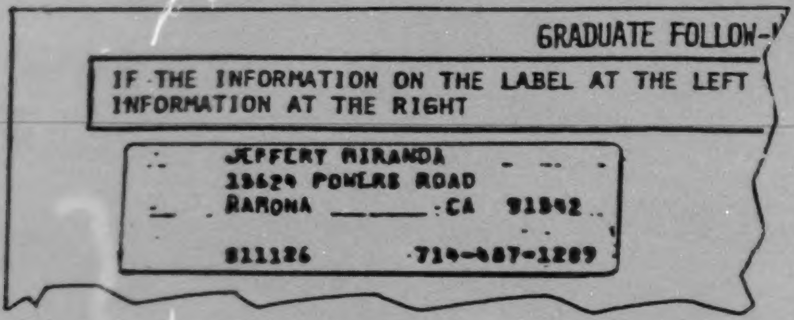
GPA
- 0.0 - 1.9 - 1
- 2.0 - 2.9 - 2
- 3.0 - 4.0 - 3

YEARS
- 1 or less
- 2
- 3
- 4

PROGRAM
- College prep - 1
- General - 2
- Vocational- 3+ code number

program is not State funded, then the entry is simply 3, as is the case with Craig Araki on the sample, and no program codes are entered. Your Vocational Coordinator or Guidance Counselor will provide you with information about students who are to be reported as disadvantaged by code 3 + 99-2000 and those who should be reported as handicapped by code 3 + 99-1000 records to complete the roster, see the guidance personnel. You should fill out the roster for the entire class accurately and quickly. When you have completed the roster, submit it to the guidance person.

3. Mail Survey Materials - The Graduate Roster will be computer processed and specific names will be selected for follow-up. You will receive a master list of these names on a printout from the TRACE Coordinator. You will also receive two sets of labels for each name on the list. One label with the graduate's number and telephone number is affixed to the graduate follow-up questionnaire as shown below. The label with the graduate's number must be placed on the questionnaire. That number will be used in processing information when the questionnaires have been returned.

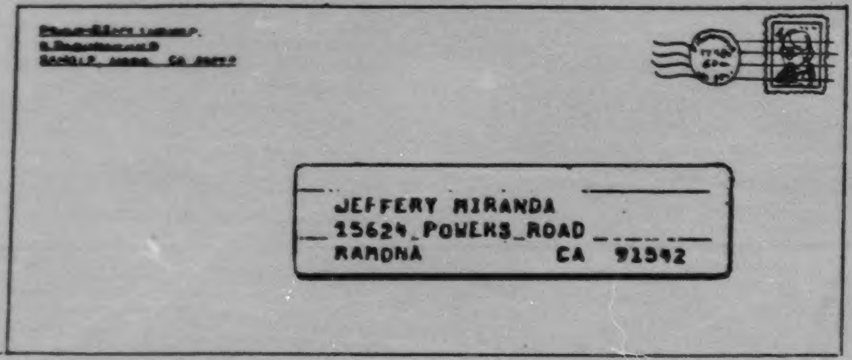


GRADUATE FOLLOW-

IF THE INFORMATION ON THE LABEL AT THE LEFT
INFORMATION AT THE RIGHT

JEFFERY MIRANDA
15624 POWERS ROAD
RAMONA CA 91542
811126 714-487-1289

Use one label with the graduate's name and address only, as shown below, for the mailing envelope.



JEFFERY MIRANDA
15624 POWERS ROAD
RAMONA CA 91542

Keep the other two labels. They may be needed for a second mailing if the questionnaire is not returned within two weeks.

Place a copy of the first cover letter, the questionnaire, and a return envelope in each mailing envelope. Make sure that the name on the questionnaire and the name on the envelope is the same. Mail the packets of materials as quickly as possible.

After approximately two weeks, you will receive instructions to mail out a second packet of materials to graduates who have not responded. Use another copy of the same questionnaire, and affix the labels as in the first mailing. Be certain to enclose a copy of the second cover letter and a return envelope. Be sure that the names on the questionnaire and the envelope match.

4. Annotate Master Name List - As the questionnaires are returned in response to the first mailing, draw a line through the respondent's name on the list and throw away the extra set of labels for that name. Forward the filled-out questionnaires to data processing, daily. Send out the second mailing when instructed to do so by the TRACE Coordinator. Mail the materials to the graduates whose names are not yet crossed off the master name list. As responses come in, follow the same procedures you used after the first mailing. Finally, after the established cut-off date, turn over to the TRACE Coordinator the master name list with the names of all graduates who returned questionnaires crossed off. At this time all filled-out questionnaires should have been sent to data processing for coding.

E. INSTRUCTIONS FOR TELEPHONE INTERVIEWERS

1. Your responsibility is to telephone high school graduates who have not responded to either of two mailed questionnaires regarding their high school and post high school experiences. You will be provided with a list of the names and telephone numbers of the people to be contacted.
2. Make three attempts to contact the graduate or someone who can provide the information: one during the day, one at night, and one during the weekend. When a contact is made, follow the "Interviewer Statement" script enclosed (page 39). The interview should be as personalized as possible. Use the graduate's name where indicated in the script and, when introducing yourself, mention the name of the school the graduate is from. The high school name appears at the top of every name list. Use the enclosed answers for some questions you might be asked (page 40).
3. Before calling, PRINT the graduate's name and ID number on the Graduate Telephone Questionniare (see page 180). The graduate's ID number is made up of the high school number (appearing to the left of the high school name and containing three digits) followed by the number directly to the left of the graduate's name (also a three-digit number). The graduate ID number therefore contains six digits. For example, if the high school number is 514 and the number directly to the left of the graduate's name is 012, then

the ID number is 514012.

4. Ask the questions on the Graduate Telephone Questionnaire (see page 180) and print the answers in the space provided on that form. For each person contacted, print the letter "T" to the left of that person's name on the master list.
5. The telephone interview contains questions that appeared on the questionnaire. Although more data from each graduate would be desirable, it is not practical to obtain via telephone. In addition to obtaining the interview data, encourage the return of the mailed, completed questionnaire so that information is more complete. This is particularly important because TRACE uses a sample of graduates from which generalizations will be made to the entire graduating class.
6. Submit the completed Graduate Telephone Questionnaires and the annotated master name list to the TRACE Coordinator.

INTERVIEWER SCRIPT

Hello, this is _____________ calling for _____________ High School. May I speak with (graduate's name) _____________?

I. IF GRADUATE IS AVAILABLE:

A. Introduce yourself if the graduate did not answer the phone originally, then continue as follows. "You may recall receiving a questionnaire within the last month regarding your high school education and experiences. We haven't received it back, and I wonder if you would be so kind as to give me some information over the phone. It will take only a few minutes. Thank you."

Proceed with Interview.

At end of Interview, thank the graduate and ask him to return the questionnaire as it contains other information we are interested in.

II. IF GRADUATE IS UNAVAILABLE:

A. Determine with whom you are speaking. If it is a relative or someone who knows the graduate well, continue as follows.

"Perhaps you might be able to help me. Several weeks ago we sent (Graduate's Name) a questionnaire concerning (His or Her) high school education and experiences. We are trying to find out what recent graduates feel was good and bad about their high school now that they're graduated and have had a chance to evaluate their education. With the information we get from the graduates we hope to correct the problems so that present and future students will receive a better education. We haven't received (Graduate's Name) questionnaire back yet and I wonder if you would be so kind as to provide me with some of the information we are seeking. It will take only a few minutes.

IF THE PARTY IS COOPERATIVE:

"Thank you." (Proceed with the Interview. Also thank at end of Interview and ask the party to remind the graduate to return the questionnaire because it contains some other items we are interested in obtaining information about.)

IF THE PARTY IS NOT COOPERATIVE:

"Can you tell me when (Graduate's Name) will be home so that I can speak with him (her)? Thank you."

(Note the time on your name list and call back then.)

QUESTIONS YOU MIGHT BE ASKED ABOUT THE FOLLOW-UP

Q - Who is sponsoring the follow-up?

A - The high school.

Q - What is the purpose of the follow-up?

A - To determine how well high school has prepared former students for their activity after graduation and to determine what problems exist in the high school. The information we obtain from the graduates will be used to pinpoint the problem areas and to evaluate the various educational programs and courses offered in the schools. In general, the aim of the project is to improve the quality of education so that graduates will be better prepared for whatever they plan to do after graduation.

Q - Are all the graduates being interviewed?

A - No. A carefully selected sample of graduates is being interviewed so that the cost of obtaining the information is kept as low as possible. The same techniques as are used in national polls are being used in the project. Each graduate represents about 4 or 5 of the graduating class members so it is important to obtain information from them. The information will be kept strictly confidential and will be available only to the school for curriculum purposes.

V

DATA PROCESSING

A. PERSONNEL

1. Data Processing Manager/Programmer Information and Instructions

As Data Processing Manager you will act as liaison between personnel in your department and other TRACE personnel such as the TRACE Coordinator and the Vocational Coordinator. You should thoroughly read and understand all aspects of the jobs to be performed by all data processing personnel including the Coders, Keypunchers, and Programmers.

You will receive from the TRACE Coordinator completed mail questionnaires and telephone questionnaires that will be prepared for computer processing by Coders and Keypunchers. You will also receive a copy of the annotated Master Name List indicating which graduates returned the mail questionnaires (their names will have been deleted from the list) and which graduates completed the telephone questionnaire (a "T" will appear to the left of their I.D. number). In some instances the graduates may have completed both types of questionnaires. In the instances where a graduate has completed both types of questionnaires only the mail questionnaire data are to be used and the telephone questionnaire is to be discarded.

The following information and instructions will enable you to perform the data processing activities for TRACE. Included is a description of the system, programs, subroutines, parameters, formats, test data, example outputs, and instructions for loading, executing and modifying programs.

There are six computer programs which perform all the sampling, data processing, and reporting requirements of TRACE.

1. Sample Selection
2. Sample Name and Address Listing
3. Mailing and Questionnaire Labels
4. Table Generation - Total Class
5. Vocational Coordinator Listing
6. VE-45 Report Generation

The language for each program is Fortran IV. The input/output devices required are a card reader and a line printer; and, for the sample selection program, an on-line disk. The individual user must check the codes for input-output device identification to determine if they conform with the user's system. The following device codes will be found in the various programs:

Device	Code
Card Reader	2, 4, 8
Printer	3, 5

The reason for the different device codes is that different computer systems were used in program development: IBM 1130, General Automation 1830, and Varian 73. The user may wish to substitute data statements for variable device code reference.

The program descriptions state what each program does, what its specific outputs are, and the requirements for implementing the program. There is provided, for each program, a program listing. (See Computer Program and Test Data, page 93), examples of the outputs (See Example Displays, page 154), and a data listing for verification of the examples on the user's system. (See Computer Programs and Test Data.)

[1.] SAMPLE SELECTION PROGRAM

The Sample Selection Program draws a stratified-random sample with proportionate representation of the following variables: sex ethnic/race background, grade-point average, program, vocational program, and years at the school. It consists of a mainline program and three subroutines.

Mainline Program

The mainline program draws an original sample stratified on sex [2 levels], ethnic/race background [5 levels], and grade-point average [3 levels]. It also applies over-sampling weights to the 30 strata in the sample. The weights represent the additional numbers required for each stratum, based on questionnaire return rates established in earlier studies.

Subroutine TRAC1

TRAC1 refines the original sample. That is, it ensures that the variables program, vocational program, and years at the school are proportionately represented. It does this while maintaining the representativeness of the sample on the major stratification variables.

Subroutine TRAC2

TRAC2 prints the sample identification descriptive codes for sample members, and population and sample comparisons for the several variables.

Subroutine RANDU

RANDU selects a random start number for each stratum of the sample. The start number and a computed skip number are used to select sample members randomly from each stratum.

Implementation

The card decks are loaded in the following order: (for Programs, see computer programs section)

A. Load and Store
   1. Subroutine TRAC1
   2. Subroutine TRAC2
   3. Subroutine RANDU
B. Load and Execute
   1. Mainline Program
   2. Data Deck (See Format Figure E, page 66)
   3. Blank Card
   4. School Name Card

Output

The following listings and tables are printed by the Sample Selection Program:

A. Listing of sample member identification numbers (these are used by the keypuncher to identify the required names and address). (See Display #1, page 155)
B. Sample listing by graduate number, sex, ethnic, program, grade-point average, and vocational program codes. (These are used by the coder for identification information in coding the questionnaires.) (See Display #2, page 156)
C. Graduating class and sample comparisons (the numbers in the samples are modified by oversampling weights). The comparisons are made on the following factors (see pages 159-161)
   1. Sex x GPA x Ethnic (See Display #3a page 159)
   2. Vocational Program (See Display #3b page 160)

3. High School Program; Years at the School (See Display #3c, page 161)

Example outputs are listed in the display section. The data base to generate the example outputs, in the appropriate format, is listed immediately following each program.

(2.) SAMPLE NAME AND ADDRESS LISTING PROGRAM

The Sample Name and Address Listing Program does just that.

Implementation

The card decks are loaded in the following order:

A. Program (Load and execute)

B. School name card

C. Data deck (see formats in Figure F, page 67)

D. Blank card

The PAUSE statements in the program are a check that the data cards are loaded in the correct order: Card "4" and Card "5" (in Column 1) for each sample number.

Output

The output is a listing of the graduate's number, name, street address, city, zip code, telephone number, and parents' name - 50 lines per page.

An example listing follows the program (Display #4, page 162). This listing may be used to generate a data deck to check the program.

(3.) MAILING AND QUESTIONNAIRE LABELS PROGRAM

The Mailing and Questionnaire Labels Program prints all the labels required for TRACE.

Implementation

The card decks are loaded in the following order:

A. Program (Load and Execute)

B. Data deck (see format in Figure F, page 67)

C. Blank card

The standard four-across, 15/16" x 2-3/4" labels are used.

The PAUSE statements are a check that the data cards are loaded in the correct order.

Output

The output is four labels for each sample member: two envelope labels, and two questionnaire labels. The questionnaire labels include graduate identification number and telephone number.

Example labels follow the program listing (see Display #5, pages 163-164). Use the data in Display #4 (page 162) to check your Mailing and Questionnaire Labels Program.

(4.) TABLE GENERATION PROGRAM

The Table Generation Program processes the m[illegible] and telephone questionnaire data for the entire sample and prints the results in tabular form.

Implementation

The card decks are loaded in the following order:

A. Program (Load and execute)

B. JTBL (6 cards)

C. ITBL (3 cards)

D. Class ID card (up to 32 characters)

E. Base ID (16 cards)

F. Column header ID (4 cards)

G. Mail ID card

H. Mail data deck (see format in Figure K, page 72)

I. End mail card (9 in column 9)

J. Blank card

K. Telephone ID card

L. Telephone data deck (see format in Figure K, page 72)

M. End telephone card (9 in column 9)

N. Table title and row ID cards (525 cards; see listing, Table Text, page 130)

The program may be modified if more questions are added. For example, if two questions are added, each with eight alternative responses, the following program changes would be made:

Line 3 --VAR (467,13) → VAR (483,13)

Line 4 --JTBL (111) → JTBL (113)

Line 32 --,1113/ → 1313/; ,1713 → 1913

Line 48 --J=I,467 → J=1, 483

Line 54 --I-1,111 → I=1,113; I=1,57 → 1,59

Line 114 --I=1,57 → I-1,59

The following control card changes would be made:

JTBL card 6 -- add: columns 34-36, 467; cols. 37-39, 475

ITBL card 3 -- add: Columns 52-54, 475; cols. 55-57, 483

Mail card == change 111 in columns 1-3 to 113

Output

The output is a detailed description of the graduating class; 57 tables of information based on the questionnaire data, about the total class and several subgroups, i.e. male and female, ethnic/race classifications, major programs taken in high school, and grade-point-average levels (see Display #6, page 165).

Examples of the tabular output are given following the program listing. Table 4 is included, even though there are no data, to illustrate that the program continues beyond the tables for which there are data. The data cards to generate the example tables are also given. Note that only the mail data deck and the telephone data deck are the example data. All other cards are required to process actual data. Changes may be made on some of these cards if additional questions are asked. (See Implementation Section above.)

(5.) VOCATIONAL COORDINATOR LISTING PROGRAM

The Vocational Coordinator Listing Program provides the Vocational Coordinator with the information required for him to make judgments about the program to be identified with each graduate, and the relatedness of the working graduate's job to his high school vocational program.

Implementation

The card decks are loaded in the following order:

A. Program (Load and execute)

B. Vocational program ID cards (see format in Figure H, page 69)

C. Blank card

D. Data deck (see card format in Figure J, page 71)

E. Blank card

Output

The outputs are listings of vocational program identifications (see Display #7, page 169) and of vocational graduates who are working full-time and/or had multiple vocational programs in high school (see Display #8, page 170). The program identification listing gives the district code, the state code and title, the numbers of males and females completing a program, and those who left a program with marketable skills. The Vocational Coordinator listing gives the school number, the graduate number and sex, the district program codes, the graduate's status, the graduate's judgment of the relatedness of his job to his high school program (if working full-time), his job title (if working) or his major (if in school full time), and provisions for the coordinator's judgment of relatedness.

Example outputs are Displays 7 and 8. The data used to generate the example outputs are listed immediately following the program.

(6.) VE-45 REPORT PROGRAM

The VE-45 Report Program processes data for graduates who completed Vocational Education programs. The percentage of the sample in each category on the VE-45 form is computed for each vocational program. This sample percentage, in turn, is used to estimate the frequency in each category of all those who completed a given program.

Implementation

The card decks are loaded in the following order:

A. Program

B. District information card (up to 80 characters)

C. Vocational program identification cards (see format in Figure H, page 69)

D. Blank card

E. Data deck (see format in Figure J, page 71)

F. Blank card

The program generates a district report - all schools in the district are combined. If individual school reports are desired, the schools may be run separately.

Output

The output is a district VE-45 report on the status of graduates of vocational programs (see Display #9, page 171). It is modeled on the present state form.

The data required to generate the example follows the program.

Use this data to test your VE-45 Report Program.

2. Coder Information and Instructions

Your task, in general, is to transpose data and information into computer-processable form using various master codes and keypunch sheets. You will receive from the TRACE Coordinator and/or the Data Processing Manager the following materials:

1. Master Codes for Vocational Program Identification Cards (Figure G, page 68)
2. Keypunch Sheets for Vocational Program Identification Cards (Figure H, page 69)
3. Filled-in mail and telephone questionnaires
4. Sample List (Display 2a, b, c, pages 156-158)
5. Master Codes for Vocational Coordinator Listing and VE-45 Report Programs (Figure I, page 70)
6. Keypunch Sheets for Vocational Coordinator Listing and VE-45 Report Programs (Figure J, page 71)
7. Master Codes for Table Generation--Total Class for Cards 1 and 2 (Figures K, pages 72-80 and L, pages 81-90)
8. Keypunch Sheets for Table Generation--Total Class Card 1 and Card 2 (Figures M, page 91 and N, page 92)

The following procedures will be followed by the Coder:

a. The Vocational Coordinator will provide information on each vocational program offered in the district including corresponding district codes (Figure B, page 27). This information should be prepared for computer processing using the Master Codes for Vocational Program Identification Cards (Figure G, page 68) and the Keypunch Sheet for Vocational Program Identification

Cards (Figure H, page 69). The information for each program is entered on one keypunch sheet as shown in Figure H. The completed keypunch sheets should be given to the Data Processing Manager for keypunching and computer processing. Retain the Vocational Coordinator information sheet for later use.

b. When you receive the filled-in mail and telephone questionnaires, do the following:

   1. Match the graduate number on the questionnaire with the corresponding number on the Sample List (Display 2, page 156).

   2. If on the Sample List the graduate has the number 3 in the column headed "H.S. Program" and a number beneath the column headed "Vocational Program," complete a Keypunch Sheet for Vocational Coordinator Listing and VE-45 Report Programs (Figure J, page 71) using the Master Codes for Vocational Coordinator Listing and VE-45 Report Programs (Figure I, page 70). The data to be entered on the keypunch sheet are obtained from the Sample List, the Vocational Coordinator information sheet used in Step (1) above, and the questionnaire.

      The school identification and graduate identification data are obtained from the questionnaire and entered in Columns 1 through 6.

      The graduate's sex is obtained from the Sample List.

The district codes for vocational programs are obtained from the Vocational Coordinator's information sheet. Match the code number of the vocational program(s) completed by the graduate listed on the Sample List with the corresponding district Vocational code number on the Vocational Coordinator's information sheet. If more than one vocational program is listed on the Sample List, enter the corresponding district Vocational codes in Columns 10 through 19. If only one program is listed on the Sample List, enter the corresponding district Vocational code in columns 20 and 21. The remaining data needed are obtained from the questionnaire. The questionnaire items from which the data are obtained are indicated on the Master Code form.

If the graduate is working either 1) full time, or 2) part time and has completed more than one vocational program, enter his job title in Columns 23-60. If he is in school full time and has completed more than one vocational program, enter his major in Columns 61-80. If either a job title or a major was entered, complete the entries for Card 2 at the bottom of the keypunch sheet. The graduate's name is obtained from the questionnaire.

The completed keypunch sheets are to be given to the Data Processing Manager for keypunching and computer processing.

3. All questionnaires, including those described in (2) above,

are to be prepared for computer processing using the Master Codes for Table Generation--Total Class (Figures K and L, pages 72 & 81) and the corresponding keypunch sheets for Cards 1 and 2 (Figures M and N, pages 91-92).

Separate the mail questionnaires from the telephone questionnaires. Code all mail questionnaires first and then all telephone questionnaires using the procedures described below. Maintain separate stacks of keypunch sheets completed for mail questionnaires and for telephone questionnaires.

Enter the school and graduate I.D. numbers in Columns 1-6 on the keypunch sheet. Leave Column 8 blank if the survey data source is a mail questionnaire, and enter a "1" if it is a telephone questionnaire.

Match the graduate's I.D. number on the questionnaire with the graduate's number on the Sample List, and from that list obtain the required data entries for Columns 9, 10, 11, and 12. The remaining data entries are obtained from the questionnaire.

Two keypunch sheets (Card 1 and Card 2) will be used for each mail questionnaire; one keypunch sheet (Card 1) will be used for each telephone questionnaire. (Note that the codes and card column formats are identical for equivalent questions from the mail and telephone questionnaires.

Telephone questionnaire items are identified on the Master Code forms.)

Give the two stacks of completed keypunch sheets to the Data Processing Manager for keypunching and computer processing.

3. Keypuncher Instructions

a. You will receive six computer program listings from the Programmer. Using the card layout which will be specified by the Programmer, punch and verify a deck of cards for each program. You may use print-punch or have the cards interpreted as soon as they have been punched. Maintain each program in a separate deck and label the deck with the program name (on the card edges) using a felt tip pen. When the programs have been punched, verified, interpreted and labeled, give them and the program listing back to the Programmer.

You will also be required to punch, verify and interpret a deck of test data cards for each program. Use the listing and format provided by the Programmer. Label each deck as test data for the specific program. Then return the test data decks and the source document listing to the Programmer.

b. You will also punch, verify and interpret a deck of student data cards using the Graduate Roster as a source document (see page 33). The Graduate Roster will be provided by the TRACE Coordinator. Punch the cards in the format specified in Figure E (page 66), and label them "Graduate Roster." After the deck has been labeled, give it to the Programmer.

c. You will receive a listing (printout) of the student numbers of the graduates selected for the follow up sample (page 155). A copy of the Graduate Roster (page 33) will accompany the listing. Starting with the first student number on the listing, find the corresponding student number on the Graduate Roster and keypunch and verify student number, name, address, telephone number, and parent's name from the Graduate Roster. (This will require two cards for each student.) The cards will be punched in the format specified in Figure F, Page 67. All cards must be interpreted or punched with a printing punch.

When two cards have been punched, verified and interpreted for each student on the listing, mark the deck "Sample Names and Addresses" and give it, together with the listing and the Graduate Roster, to the Programmer for further processing.

d. You will receive a list of State Vocational Education program numbers (8 digit) and corresponding district code numbers (2 digit). You will punch and verify one card for each State Program number. When the cards have been punched, verified and interpreted, you will mark the deck "Voc. Prog. Ident." and give it to the Programmer. Figure H, Page 69 shows the card layout for the Vocational Program Identifications cards. Observe the blanks (no punch) in columns 3, 14, 56, 61, 66 and 71. Punch the "slashes" in columns 6 and 11. In columns 4 through 13 make sure that all zeroes are punched; if one of these columns is blank, punch zero.

e. You will receive completed keypunch sheets and will punch, verify and interpret from the sheets two decks of cards in a format specified in Figure J, Page 71. There will be one keypunch sheet for each student. All keypunch sheets will have information to be punched into a first card and some of them will also have information to be punched into a second card. You will prepare one deck that contains Card 1 only and another deck that contains Cards 1 and 2. (Note: for some students there will be one card and for other students there will be two cards. The decks for these two types of students must be kept separate. (Be certain that no student appears in both decks.) The card order for the deck with two cards will be Card 1 - Card 2 sequentially for each student in that deck.

When the two decks of cards have been punched, verified and interpreted you will mark the deck with one card only "VE-45," and mark the deck with Cards 1 and 2 "Voc. Coord. Lstg." and give them and the code sheets to the Programmer.

f. You will receive annotated Vocational Coordinator Listings (see page 28) and two decks of cards from the Programmer. The two decks of cards will be marked "VE-45" and "Voc. Coord. Lstg." Using the annotated Vocational Coordinator Listing as a source document you will make corrections in Card 1 of the deck marked "Voc. Coord. Lstg." Starting with the first line that has had changes made in ball point or pencil on the annotated Vocational Coordinator Listing, you will identify the student number on the Vocational Coordinator Listing and match it with the student number in Card 1 of the "Voc. Coord. Lstg." deck. (Note: the student number will be 3 digits and will appear below the student's first name.) Remove Card 1 and duplicate it making the changes indicated on the annotated Vocational Coordinator Listing in the new card. Use the card format specified in Figure J, (page 71). The corrections may require punching a two-digit district vocational code (circled on the Vocational Coordinator Listing) in Columns 20 and 21, and a change in graduate status (as indicated on the Vocational Coordinator Listing) in Column 22, or both. The only graduate status codes that may be changed (in Column 22) are 5 (specific), 6 (related), or 7 (unrelated). Place each new card that you punch with the deck marked "Voc. Coord. Lstg." and discard the original card. When you have finished punching the changes indicated on the Vocational Coordinator Listing take the remaining cards in the deck marked "Voc. Coord. Lstg." and do the following with them:

(1.) Sort out all remaining Card 1's and place them with the deck marked "VE-45."

(2.) Discard all of the remaining Card 2's.

Give the corrected deck marked "VE-45" and the annotated Vocational Coordinator Listing to the Programmer.

g. You will receive two sets of keypunch sheets from the Programmer. One set of sheets will be for students who have returned questionnaires by mail and the other set will be for students who were contacted by telephone. You will keypunch, verify and interpret one deck of cards for the mailed questionnaires and another deck for the telephone questionnaires. Keep the two decks separate.

You will punch two cards for each student who returned a questionnaire by mail and the card sequence in the deck will be Card 1, Card 2 for each student.

You will punch one card for each student who was contaced by telephone.

When the cards have been punched, verified and interpreted, mark the deck with two cards for each student "Mailed Questionnaires" and the deck with one card per student "Telephone Questionnaire." Give both decks and the two sets of sheets to the Programmer.

4. Master Codes, Card Formats
and
Keypunch Sheets
for Coders and Keypunchers

FIGURE E

CARD FORMAT FOR SAMPLE SELECTION PROGRAM

(Keypunched From Graduate Roster)

Col.	
1.	1
2.	Optional
3.	Optional
4.	Optional
5.	Optional
6.	School ID
7.	
8.	
9.	Blank or last digit of school year
10.	Grad. Number
11.	
12.	
13.	Sex (1,2)
14.	Ethnic (1, 2, 3, 4, 5)
15.	GPA (1, 2, 3)
16.	Years (1, 2, 3, 4)
17.	Program (1, 2)
18.	Program (3)*
19.	Blank
20.	Program 3 Code (Left justify - Do not drop leading zero)
21.	
22	
23.	
24.	
25	
26.	
27.	
28.	Blank
29.	Program 3 Code (Left justify - Do not drop leading zero)
30.	
31.	
32.	
33.	
34.	
35.	
35.	
36.	
37.	Blank
38.	Program 3 Code (Left Justify - Do not drop leading zero)
39.	
40.	
41.	
42.	
43.	
44.	
45.	

Col.	
46.	Blank
47.	Program 3 Code (Left justify - Do not drop leading zero)
48.	
49.	
50.	
51.	
52.	
53.	
54.	
55.	Blank
56.	Program 3 Code (Left justify - Do not drop leading zero)
57.	
58.	
59.	
60.	
61.	
62.	
63.	
64.	
65.	
66.	May be used for school name
67.	
68.	
69.	
70.	
71.	
72.	
73.	
74.	
75.	
76.	
77.	
78.	
79.	
80.	

*Do not keypunch "+" following "3" in column 18.

FIGURE F

Card Format for Mailing and Questionnaire Labels Program
(Punched from Graduate Roster)

First Card

Col.	
1	4
2-5	Optional
6-8	School ID
9	Blank
10-12	Graduate ID
13	Blank
14-38	Student Name
39-40	Blank
41-65	Street Address
66-80	Not used

Second Card

Col.	
1	5
2-5	Optional
6-8	School ID
9	Blank
10-12	Graduate ID
13	Blank
14-30	City and State
31-40	Blank
41-45	Zip Code
46-48	Area Code
49-55	Telephone Number
56-80	Parent's Name

FIGURE G

Master Codes for Vocational Program Identification Cards (Used with Vocational Coordinator Listing and VE-45 Report Programs)

Columns 1, 2   District Vocational Program Code

This is a 2-digit code used to identify the state vocational programs within your district. The codes will range from 01 to the numeral corresponding to the number of different programs in your district.

Column 3   Blank

Columns 4-13   State Vocational Program Code

This is the vocational program code the state uses and which will be reported on the VE-45 form. Left justify these codes and record all leading and trailing zeros.

Column 14   Blank

Columns 15-55   Vocational Program Title (41 characters)

Record the exact title of the program. Abbreviate only if space limitation requires it.

Column 56   Blank

Columns 57-60   Number Completing Program: Male

Right justify this number. Leading zeros need not be recorded.

Column 61   Blank

Columns 62-65   Number Completing Program: Female

Right justify.

Column 66   Blank

Columns 67-70   Number Leaving Early with Marketable Skills: Male

Right justify. This number, and the number of females, may not be available until the Vocational Coordinator responds to the vocational graduates listing. These numbers must be entered (some may be zeros) for use of these cards in the VE-45 Report Program.

Column 71   Blank

Columns 72-75   Number Leaving Early with Marketable Skills: Female

Right justify.

FIGURE H

Keypunch Sheet for Vocational Program Identification Cards

(Example)

	Col.		
District Code	1-	0	
	2-	1	
	3-	b	blank
State Code	4-	1	
	5-	4	
	6-	/	slash
	7-	0	
	8-	3	
	9-	0	
	10-	3	
	11-	/	slash
	12-	0	
	13-	0	
	14-	b	
Prog. Title	15-55-	GENERAL OFFICE CLERKS	
	56-	b	
Males Comp.	57-		
	58-		
	59-	2	
	60-	2	
	61-	b	
Females Comp.	62-		
	63-	1	
	64-	2	
	65-	4	
	66-	b	
Males Leaving	67-		
	68-		
	69-		
	70-	0	
	71-	b	
Females Leaving	72-		
	73-		
	74-		
	75-	2	

FIGURE I

Master Codes For Vocational Coordinator Listing and VE-45 Report Programs

Columns 1, 2, 3, School Identification
Columns 4, 5, 6, Graduate Identification
Columns 7, 8 Blanks
Column 9 Sex

1 - Male
2 - Female

Columns 10-11, 12-13, 14-15, 16-17, 18-19 District Codes for Vocational Programs
Used only if multiple programs.

Columns 20-21 District Code for Vocational Programs
Used if single vocational program listed and for single program identified by the Vocational Coordinator.

Column 22 Graduate Status: Q.1 and Q.6 Mail Quex; Q.1 and Q.5 Telephone Quex.

Note: Only one code number may be placed on the keypunch sheet for Question #1 (col. 22). In the event that more than one response to Question #1 is on any questionnaire you will select and record only one of the responses. Use the following order of importance for selecting the response that you record on the keypunch sheet:

a. Working full-time
b. School full-time
c. Working part-time
d. In armed forces
e. Not working, looking for a job
f. In school part-time/housewife/not working, not looking for a job

For example, if a student had checked both "School full-time" and "Not working, looking for a job," you would record only "School full-time."

1. In armed forces (Q.1)
2. In school, full-time (Q.1)
3. In school, part-time or housewife or not working, not looking for a job (Q.1)
4. Not used
5. Working, full-time (Q.1) and specific (Q.6)
6. Working, full-time (Q.1) and related (Q.6)
7. Working, full-time (Q.1) and unrelated (Q.6)
8. Working, part-time (Q.1)
9. Not working, looking for a job (Q.1)

Columns 23-60 Job Title (38 characters): Q.8 Mail Quex; Q.4 Telephone Quex
Use only if a) working full-time, or b) if working part-time and multiple vocational programs listed.

Columns 61-80 School Major (20 characters): Q.4 Mail Quex; No Q. on Tel. Quex
Use only if in school full-time and multiple vocational programs listed.

FIGURE J

Keypunch Sheet for Vocational Coordinator Listing and VE-45 Report Programs

First Card	Col.	
School ID	1-	
	2-	
	3-	
Grad. ID	4-	
	5-	
	6-	
Card No.	7-	1
	8-	b blank
Sex	9-	
Dist. Codes	10-	
	11-	
	12-	
	13-	
	14-	
	15-	
	16-	
	17-	
	18-	
	19-	
Final Dist. Code	20-	
	21-	
Grad. Status	22-	
Job Descrp.	23-60-	
College Major	61-80-	

Second Card	Col.	
School ID	1-	
	2-	
	3-	
Grad. ID	4-	
	5-	
	6-	
Card No.	7-	2
	8-13-	b
Grad. Name	14-40	

(Card 2 is used only for the Vocational Coordinator Listing Program and is completed only for vocational graduates with multiple programs or working full-time or both.)

FIGURE K

Master Codes for Table Generation Program--Total Class: Card #1

MASTER CODES: TOTAL CLASS--CARD #1

Cols. 1, 2, 3 School Identification

Cols. 4, 5, 6 Graduate Identification

Col. 7 Card Number

1 - Card #1

Col. 8 Survey Data Source

1 - Telephone Questionnaire
Blank - Mailed Questionnaire

Col. 9 Sex

1 - Male
2 - Female

Col. 10 Ethnic Background

1 - Black
2 - Caucasian
3 - Spanish Surname
4 - Other

Col. 11 High School Program

1 - College Prep.
2 - General
3 - Vocational

Col. 12 G.P.A.

1 - 0-1.99
2 - 2.0-2.99
3 - 3.0-4.0

Q. 1 What Presently Doing?

Q. 1 (Telephone)

Col. 13: 1 - In school full time
2 - In school part time

Col. 14: 1 - Working full time
2 - Working part time

Col. 15: 1 - In Armed Forces
2 - Housewife

Col. 16: 1 - Not working, looking for job
2 - Not working, not looking for job

Col. 17: 1 - Other
2 - Not used; reserved for computer
3 - " " " " "
4 - No answer to Q. 1

Q. 2 Type School Attending

Q. 2 (Telephone)

Col. 18: 1 - Four-year college/university
2 - Technical school
3 - Trade school
4 - Private business school
5 - Other
6 - Community college

Junior College Plan

Col. 19: 1 - Plan transfer to four-year school
2 - Two-year AA program only
3 - Certificate program
4 - Other/No answer program/ if Telephone answer is community college
5 - No answer to Q. 2 if attending school (1 or 2 in Col. 13)

Q. 3 Name of School

Q. 2 (Telephone)

Col. 20: 1 - Any University of California
2 - Any California State University
3 - Any other California State College
4 - Any California Community College
5 - Any California private university/college
6 - Other California school
7 - U. S. school outside of California
8 - Foreign school
9 - No answer to Q. 3 if attending school (1 or 2 in Col. 13)

Q. 4 Major Subjects

Cols. 21 & 22:
01 - Social Sciences--Soc/Psych/Poli Sci/History/Anthro/Philos
02 - Physical Sciences--Physics/Chem/Math/Geol/Geog
03 - Biological Sciences--Biol/Medicine/Dentist/Life Sci/Physical/Biochem/Nursing
04 - Education/Phys Ed/School Administration
05 - Engineering
06 - English/Humanities/Literature/Foreign Lang
07 - Art/Music/Acting/Theater Arts
08 - Business/Law
09 - Police Science/Fire Science/Forestry
10 - Other major
11 - No major
12 - No answer to Q. 4 if attending school (1 or 2 in Col. 13)

Q. 5 Present Job Situation

Col. 23:
1 - Unemployed but looking for job
2 - In apprenticeship program
3 - Receiving on-the-job training
4 - In a job I am fully qualified for
5 - No answer to Q. 5 if working/looking for job (1 or 2 in Col. 14 or 1 in Col. 16)

Q. 6 Statement Describing Job Q. 5 (Telephone)

Col. 24:
1 - Received specific high school training for job
2 - In a field related to high school training
3 - In a field unrelated to high school training
4 - No answer to Q. 6 if working/looking for job (1 or 2 in Col. 14 or 1 in Col. 16)

Q. 7 Industry Q. 3 (Telephone)

Cols. 25 & 26:
01 - Aerospace
02 - Agriculture
03 - Construction
04 - Finance/Real Estate
05 - Government
06 - Manufacturing
07 - Transportation/Communications
08 - Wholesale/Retail Merchandising
09 - Service Industry
10 - Other Industry
11 - No answer to Q. 7 if working (1 or 2 in Col. 14)

Q. 8 Job Title/Occupation — Q. 4 (Telephone)

Cols. 27 & 28:

01 - Social Sciences/Humanities/Psychology/Sociologist/Anthropologist/etc.
02 - Physical Sciences/Computer Operator/Engineer/Chemist/etc.
03 - Medicine/MD/DDS/RN/Biological Sciences
04 - Education/Teaching/School Administration
05 - Law Enforcement/Police/Fire/Forestry
06 - Law/Lawyer
07 - Creative Occupations/Artist/Musician/Dancer/Writer/Journalist/etc.
08 - Business/Management/Accounting/Proprietor/etc.
09 - General Office/Clerical/Bookkeeper/Teller/Secretary/Typist/etc.
10 - Sales
11 - Skilled Labor/Skilled Service Worker/Trades/Mechanic/Beautician/Barber
12 - Semi-Skilled Labor/Semi-Skilled Service Worker/Machine Operator/Truck Driver
13 - Unskilled Labor/Unskilled Service Worker/Maid/Janitor/etc.
14 - Restaurant Worker/Waitress/Busboy
15 - Housewife/Mother/Other Occupation
16 - No answer to Q. 8 if working (1 or 2 in Col. 14)

Q. 9 Distance from High School — Q. 4 (Telephone)

Col. 29:

1 - 0-10 Miles
2 - 11-25 Miles
3 - 26-50 Miles
4 - 50-100 Miles
5 - More than 100 Miles
6 - No answer to Q. 9 if working (1 or 2 in Col. 14)

Q. 10 Who Helped You Get Job

Col. 30:

1 - Parents, relatives, friends
2 - High school Vocational Counselor
3 - Got it on my own
4 - Private employment agency
5 - State/Public employment agency
6 - Other help
7 - No answer to Q. 10 if working (1 or 2 in Col. 14)

Q. 11-1 Work Interesting

Col. 31: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 11-1 if working (1 or 2 in Col. 14)

Q. 11-2 Advancement Chances Good

Col. 32: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 11-2 if working (1 or 2 in Col. 14)

Q. 11-3 Pay is Good

Col. 33: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 11-3 if working (1 or 2 in Col. 14)

Q. 11-4 Satisfied with Job

Col. 34: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 11-4 if working (1 or 2 in Col. 14)

Q. 11-5 Job Related to Occupational Objective

Col. 35: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 11-5 if working (1 or 2 in Col. 14)

Q. 12-1 Art, Music

Col. 36: 1 - Took one or more courses in these areas
Blank - Took no courses in these areas

Col. 37: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 38: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-1

Q. 12-2 Drama, Speech

Col. 39: 1 - Took one or more courses in these areas
Blank - Took no courses in these areas

Col. 40: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 41: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-2

Q. 12-3 English, Literature, Writing

Col. 42: 1 - Took one or more courses in these areas
Blank - Took no courses in these areas

Col. 43: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 44: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-3

Q. 12-4 Foreign Language

Col. 45: 1 - Took one or more courses in this area
Blank - Took no courses in this area

Col. 46: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 47: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-4

Q. 12-5 Mathematics

Col. 48: 1 - Took one or more courses in this area
Blank - Took no courses in this area

Col. 49: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 50: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-5

Q. 12-6 Science

Col. 51: 1 - Took one or more courses in this area
Blank - Took no courses in this area

Col. 52: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 53: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-6

Q. 12-7 Social Studies

Col. 54: 1 - Took one or more courses in this area
Blank - Took no courses in this area

Col. 55: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 56: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-7.

Q. 12-8 Agricul., Horticul., Forestry

Col. 57: 1 - Took one or more courses in these areas
Blank - Took no courses in these areas

Col. 58: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 59: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-8

Q. 12-9 Business and Office Practices

Col. 60: 1 - Took one or more courses in these areas
Blank - Took no courses in these areas

Col. 61: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 62: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-9

Q. 12-10 Distrib. Ed., Merch'dsing, Sales

Col. 63: 1 - Took one or more courses in these areas
Blank - Took no courses in these areas

Col. 64: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 65: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-10

Q. 12-11 Health, Medical, Hospital

Col. 66: 1 - Took one or more courses in these areas
Blank - Took no courses in these areas

Col. 67: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 68: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-11

Q. 12-12 Home Ec., Consumer Ed.

Col. 69: 1 - Took one or more courses in these areas
Blank - Took no courses in these areas

Col. 70: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 71: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-12

Q. 12-13 Indust., Tech., and Trade Skills

Col. 72: 1 - Took one or more courses in these areas
Blank - Took no courses in these areas

Col. 73: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 74: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-13

Q. 12-14 Work Experience Program

Col. 75: 1 - Took one or more courses in this area
Blank - Took no courses in this area

Col. 76: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 77: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-14

Q. 12-15 Physical Education

Col. 78: 1 - Took one or more courses in this area
Blank - Took no courses in this area

Col. 79: 1 - Not useful in present activity
2 - Somewhat useful in present activity
3 - Very useful in present activity
4 - No answer to "How useful in present activity"

Col. 80: 1 - Wish I had taken some/more courses
2 - No answer to Q. 12-15

FIGURE L

Master Codes for Table Generation Program--Total Class: Card #2

MASTER CODES: TOTAL CLASS--CARD #2

Cols. 1, 2, 3 School Identification

Cols. 4, 5, 6 Graduate Identification

Col. 7 Card Number

2 - Card #2

Col. 8 Survey Data Source

1 - Telephone Interview
Blank - Mailed Questionnaire

Q. 13-1 Most Useful Subject

Cols. 9 & 10:
- 01 - Art/Music
- 02 - Drama/Speech
- 03 - English/Literature/Writing
- 04 - Foreign Language
- 05 - Mathematics
- 06 - Science
- 07 - Social Studies
- 08 - Agriculture/Horticulture/Forestry
- 09 - Business and Office Practices
- 10 - Distributive Educ/Merchandising/Sales
- 11 - Health/Medical/Hospital
- 12 - Home Economics/Consumer Education
- 13 - Industrial/Technical/Trade Skills
- 14 - Work Experience
- 15 - Physical Education
- 16 - No answer to Q. 13-1

Q. 13-2 Second Most Useful Subject

Cols. 11 & 12:

01 - Art/Music
02 - Drama/Speech
03 - English/Literature/Writing
04 - Foreign Language
05 - Mathematics
06 - Science
07 - Social Studies
08 - Agriculture/Horticulture/Forestry
09 - Business and Office Practices
10 - Distributive Educ/Merchandising/Sales
11 - Health/Medical/Hospital
12 - Home Economics/Consumer Education
13 - Industrial/Technical/Trade Skills
14 - Work Experience
15 - Physical Education
16 - No answer to Q. 13-2

Q. 13-3 Third Most Useful Subject

Cols. 13 & 14:

01 - Art/Music
02 - Drama/Speech
03 - English/Literature/Writing
04 - Foreign Language
05 - Mathematics
06 - Science
07 - Social Studies
08 - Agriculture/Horticulture/Forestry
09 - Business and Office Practices
10 - Distributive Educ/Merchandising/Sales
11 - Health/Medical/Hospital
12 - Home Economics/Consumer Education
13 - Industrial/Technical/Trade Skills
14 - Work Experience
15 - Physical Education
16 - No answer to Q. 13-3

Q. 14 Courses Wish Had Taken

Cols. 15 & 16:

Blank - No courses
01 - Business Subjects/Courses (Unspecified)
02 - Secretarial/Steno/Typing/Office Practice
03 - Bookkeeping/Accounting
04 - Work Experience Program
05 - Physics/Chemistry/Biology/Advanced Science
06 - Agriculture/Horticulture/Forestry/Wildlife
07 - Sociology/Psychology/Philosophy
08 - Music/Vocal Music/Piano/Music Theory
09 - Foreign Language/German/Spanish/Latin/etc.
10 - Medical/Health/Nursing/First Aid
11 - Algebra/Trig/Geometry/Calculus
12 - Math/More Math (Unspecified)
13 - Auto Shop/Body and Fender/Mechanics/M-Cycle Mechanics
14 - Data Processing/Computer Programming/Keypunching
15 - Literature/English/American/Advanced/Shakespeare
16 - Sales/Merchandising/Advertising
17 - Speech/Drama/Acting/Public Speaking
18 - Arts/Crafts/Ceramics/Jewelry/Photography
19 - English Grammar/Vocabulary/Spelling/Basics
20 - Trade Skills/Technical/Industrial/Occupational/Vocational Skills
21 - Other courses
22 - No answer to Q. 14

Q. 15 Educational Program

Col. 17:
1 - Same Program I took before
2 - A different program
3 - No answer to Q. 15

Which Type High School Program

Col. 18:
1 - College Prep.
2 - Vocational
3 - Other
4 - No answer. What program type

Which Type Vocational Program

Cols. 19 & 20:
01 - (Do not use this code.)
02 - Business/Business Courses (Unspecified)
03 - Secretary/Steno/Typist/Office Practice
04 - Industrial Arts/Auto/Machine/Wood Shop
05 - Engineering/Electronics/Computer
06 - Art/Music
07 - Forestry/Agriculture
08 - Health/Medical/Hospital/Nursing
09 - Home Economics/Sewing/Cooking
10 - Other Vocational Program
11 - No answer. Type Vocational Program

Q. 16 Occupational Choice in High School

Cols. 21 & 22:

01 - Social Sciences/Humanities/Psychology/etc.
02 - Physical Sciences/Engineer/Computer
03 - Biological Sciences/MD/DDS/RN/Medicine
04 - Education/Teaching/School Administration
05 - Law Enforcement/Police/Fire/Forestry
06 - Law/Lawyer
07 - Artist/Musician/Dancer/Writer/Journalist/etc.
08 - Business/Management/Accounting/Proprieter
09 - General Office/Clerical/Bookkeeper/Teller
10 - Sales
11 - Skilled Labor/Trades/Mechanic/Beautician/Barber
12 - Semi-Skilled Labor/Machine Operator/Truck Driver
13 - Unskilled Labor/Maid/Janitor/etc.
14 - Restaurant Worker/Waitress/Busboy
15 - Housewife/Other occupation
16 - No choice/No answer to Q. 16

Q. 17 Occupational Choice Now

Cols. 23 & 24:
01 - Social Sciences/Humanities/Psychology/etc.
02 - Physical Sciences/Engineer/Computer
03 - Biological Sciences/MD/DDS/RN/Medicine
04 - Education/Teaching/School Administration
05 - Law Enforcement/Police/Fire/Forestry
06 - Law/Lawyer
07 - Artist/Musician/Dancer/Writer/Journalist/etc.
08 - Business/Management/Accounting/Proprietor
09 - General Office/Clerical/Bookkeeper/Teller
10 - Sales
11 - Skilled Labor/Trades/Mechanic/Beautician/Barber
12 - Semi-Skilled Labor/Machine Operator/Truck Driver
13 - Unskilled Labor/Maid/Janitor/etc.
14 - Restaurant Worker/Waitress/Busboy
15 - Housewife/Other occupation
16 - No choice/No answer to Q. 17

Col. 25: 1 - Had made choice in high school (From Q. 16)

Col. 26: 1 - Same choice now (From Q. 16 & 17)
2 - Different choice now

Col. 27: 1 - Had not made a choice in high school (From Q. 16)

Col. 28: 1 - Since made choice
2 - Still no choice (From Q. 16 & 17)
3 - Dual choice in high school

Q. 18 Helped Plan for Future

Cols. 29 & 30:
01 - Parents and relatives
02 - On-campus friends
03 - Off-campus friends
04 - School counselors
05 - Teachers
06 - Work experience advisor
07 - Myself
08 - No one
09 - Other help
10 - Mentioned more than one
11 - No answer to Q. 18

Q. 19 Member of Organization

Col. 31: 1 - Was a member of high school team/club/organization
2 - Was not a member of high school team/club/organization
3 - No answer to Q. 19

Student Government

Col. 32: Blank - Not member
1 - Member

Col. 33: 1 - Worthwhile
2 - Not worthwhile

Athletic Teams

Col. 34: Blank - Not member
1 - Member

Col. 35: 1 - Worthwhile
2 - Not worthwhile

Scholastic Club

Col. 36: Blank - Not member
1 - Member

Col. 37: 1 - Worthwhile
2 - Not worthwhile

Publications

Col. 38: Blank - Not member
1 - Member

Col. 39: 1 - Worthwhile
2 - Not worthwhile

Vocational Club

Col. 40: Blank - Not member
1 - Member

Col. 41: 1 - Worthwhile
2 - Not worthwhile

Music, Acting

Col. 42: Blank - Not member
1 - Member

Col. 43: 1 - Worthwhile
2 - Not worthwhile

Cheerleader, Drill Team

Col. 44: Blank - Not member
1 - Member

Col. 45: 1 - Worthwhile
2 - Not worthwhile

Other Organization

Col. 46: Blank - Not member
1 - Member

Col. 47: 1 - Worthwhile
2 - Not worthwhile

Q. 20-1 Reading

Col. 48: 1 - Not helpful
2 - Somewhat helpful
3 - Very helpful
4 - No answer to Q. 20-1

Q. 20-2 Writing

Col. 49: 1 - Not helpful
2 - Somewhat helpful
3 - Very helpful
4 - No answer to Q. 20-2

Q. 20-3 Numerical Problems

Col. 50: 1 - Not helpful
2 - Somewhat helpful
3 - Very helpful
4 - No answer to Q. 20-3

Q. 20-4 Speaking

Col. 51: 1 - Not helpful
2 - Somewhat helpful
3 - Very helpful
4 - No answer to Q. 20-4

Q. 20-5 Marriage, Family

Col: 52: 1 - Not helpful
2 - Somewhat helpful
3 - Very helpful
4 - No answer to Q. 20-5

Q. 20-6 Getting a Job

Col. 53: 1 - Not helpful
2 - Somewhat helpful
3 - Very helpful
4 - No answer to Q. 20-6

Q. 20-7 Proper English

Col. 54: 1 - Not helpful
2 - Somewhat helpful
3 - Very helpful
4 - No answer to Q. 20-7

Q. 20-8 Thinking Out Problems

Col. 55: 1 - Not helpful
2 - Somewhat helpful
3 - Very helpful
4 - No answer to Q. 20-8

Q. 21-1 Counselor Plans for High School Program

Col. 56: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 21-1

Q. 21-2 Counselor Plans After Graduation

Col. 57: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 21-2

Q. 21-3 Teachers Made Courses Interesting

Col. 58: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 21-3

Q. 21-4 Teachers Met Needs

Col. 59: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 21-4

Q. 21-5 Teachers Related To Today's Needs

Col. 60: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 21-5

Q. 21-6 Teachers Not Prejudiced

Col. 61: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 21-6

Q. 21-7 High School Rewarding Experience

Col. 62: 1 - Strongly disagree
2 - Disagree
3 - Not sure/undecided
4 - Agree
5 - Strongly agree
6 - No answer to Q. 21-7

Cols. 63 - 80 Spares

FIGURE M

KEYPUNCH SHEET FOR TABLE GENERATION - TOTAL CLASS CARD 1

	Col.	
School I.D.	1- 2- 3-	
Graduate I.D.	4- 5- 6-	
Card No.	7-	1
Survey Data Source	8-	
Sex	9-	
Ethnic Background	10-	
High School Program	11-	
G.P.A.	12-	
Q1-What Presently Doing?	13- 14- 15- 16- 17-	
Q2-Type School Attending	18-	
Junior College Plan	19-	
Q3-Name of School	20-	
Q4-Major Subjects	21- 22-	
Q5-Present Job Situation	23-	
Q6-Stat. Describing Job	24-	
Q7-Industry	25- 26-	
Q8-Job Title/Occupation	27- 28-	
Q9-Distance From High School	29-	
Q10-Who Helped Get Job	30-	
Q11-Statmts. About Work a) Work is interesting	31-	
b) Advancement Chances Good	32-	
c) Pay is Good	33-	
d) Satisfied With Job	34-	
e) Related to Occ. Objective	35-	

	Col.	
Q12-High School Courses (1) Art/Music	36- 37- 38-	
(2) Drama/Speech	39- 40- 41-	
(3) English/Literature/ Writing	42- 43- 44-	
(4) Foreign Language	45- 46- 47-	
(5) Mathematics	48- 49- 50-	
(6) Science	51- 52- 53-	
(7) Social Studies	54- 55- 56-	
(8) Agriculture/Hort./ Forestry	57- 58- 59-	
(9) Business/Office Practice	60- 61- 62-	
(10) Distribution Edu./ Merchandising/Sales	63- 64- 65-	
(11) Health/Medical/Hosp.	66- 67- 68-	
(12) Home Ec./Consumer Ed.	69- 70- 71-	
(13) Ind./Tech./Trade Skills	72- 73- 74-	
(14) Work Experience	75- 76- 77-	
(15) Physical Education	78- 79- 80-	

FIGURE N

EYPUNCH SHEET FOR TABLE GENERATION - TOTAL CLASS CARD 2

	Col.	
School I.D.	1- 2- 3-	
Graduate I.D.	4- 5- 6-	
Card No.	7-	2
Survey Data Source	8-	
Q13-Most Useful Subject	9- 10-	
Q13-Second Most Useful Subject	11- 12-	
Q13-Third Most Useful	13- 14-	
Q14-Courses Wish Had Taken	15- 16-	
Q15-Education Program	17-	
Which Type H.S. Program	18-	
Which Type Voc. Program	19- 20-	
Q16-Occ. Choice in H.S.	21- 22-	
Q17-Occ. Choice H.S.	23- 24-	
Made Choice in H.S.	25-	
Same/Different Choice Now	26-	
Had Not Made Choice in H.S.	27-	
Made Choice Since Then?	28-	
Q18-Who Helped Plan for Future	29- 30-	
Q19-Any Organization Membership	31-	
Student Government	32- 33-	
Athletic Teams	34- 35-	
Scholastic Club	36- 37-	

	Col.	
Publications	38- 39-	
Vocational Club	40- 41-	
Music/Acting	42- 43-	
Cheerleader/Drill team	44- 45-	
Other Organization	46- 47-	
Q20-Helpfulness Reading	48-	
Writing	49-	
Numerical Problems	50-	
Speaking	51-	
Marriage/Family	52-	
Getting a Job	53-	
Proper English	54-	
Thinking Out Problems	55-	
Q21-Descriptive Statements Counselor H.S. Program	56-	
Counselor Plans After Grad	57-	
Teachers Made Classes Interesting	58-	
Teachers Met Needs	59-	
Teachers Related to Today	60-	
Teachers Not Prejudiced	61-	
H.S. Rewarding Experience	62-	

Spares

63		72	
64		73	
65		74	
66		75	
67		76	
68		77	
69		78	
70		79	
71		80	

B. COMPUTER PROGRAMS AND TEST DATA

1. Sample Selection Program
and
Test Data

```
PAGE   1

// JOB
  0000         0004         0004         0000

V2 M11   ACTUAL  8K  CONFIG  8K

// FOR
**SUBROUTINE TRAC1 REFINES ORIGINAL SAMPLE
*LIST SOURCE PROGRAM
*ONE WORD INTEGERS
```

SAMPLE SELECTION PROGRAM:

SUBROUTINE TRAC1, Page 1

```
      SUBROUTINE TRAC1
      DIMENSION IERR(100),INCL(50), LYRS(5),ICHK(120),IVOC(5),IPROG(3)
      COMMON NREC,N,NNV,MX(30),NX(30),MYRS(5),NYRS(5),MPROG(3),NPROG(3),
     1MVOC(100,2),NVOC(100,2),JVOC(100,2)
      EQUIVALENCE (IERR(1),ICHK(1)),(INCL(1),ICHK(101))
C
C--BEGINS SAMPLE ADJUSTMENT
C
C--STEP 1 - CALCULATES DIFFERENCES BETWEEN PROJECTED + ACTUAL VOC.PROG.
C          CELL SIZES
      INCL(1)=0
      IUNDR=0
      IOVER=0
      RATIO=(N*1.)/(NREC*1.)
      DO 110 I=1,NNV
      J=(MVOC(I,1)+MVOC(I,2))*RATIO+.95
      IE=NVOC(I,1)+NVOC(I,2)-J
      IF(IE)108,110,109
108   IUNDR=IUNDR+IE
      GO TO 110
109   IOVER=IOVER+IE
110   IERR(I)=IE
C--STEP 2 - ADD ANY NON-SAMPLE MEMBER WHO ADDS TO A SHORT VOC. PROGRAM
C          INCL. ONLY STUDENTS FROM CELLS ALSO HAVING NON-VOC. STUDENTS
      NADD=0
      IF(IUNDR)114,140,140
114   DO 135 IREC=1,NREC
      READ(1'IREC)ICODE,NDX,IGRAD,IYRS,IPROG,IVOC
      IF(NDX)115,115,135
115   IF(NX(ICODE))135,135,116
116   IF(IVOC(1))135,135,117
117   IDUM=IVOC(1)
      IF(IERR(IDUM))125,118,118
118   DO 120 I=2,5
      IF(IVOC(I))135,135,119
119   IDUM=IVOC(I)
      IF(IERR(IDUM))125,120,120
120   CONTINUE
      GO TO 135
125   NYRS(IYRS)=NYRS(IYRS)+1
      DO 126 I=1,3
126   NPROG(I)=NPROG(I)+IPROG(I)
      ISEX=((ICODE-1)/15)+1
      DO 130 I=1,5
      J=IVOC(I)
      IF(J)131,131,127
127   IERR(J)=IERR(J)+1
      IF(IERR(J))129,129,128
128   IOVER=IOVER+1
      GO TO 130
129   IUNDR=IUNDR+1
130   NVOC(J,ISEX)=NVOC(J,ISEX)+1
```

SAMPLE SELECTION PROGRAM:

SUBROUTINE TRAC1, Page 2

```
131     NDX=1
        WRITE(1'IREC)ICODE,NDX
        NX(ICODE)=NX(ICODE)-1
        NADD=NAUD+1
        INCL(NADD)=ICODE
        IF(IUNDR)135,140,140
135     CONTINUE
C--STEP 3 - CALCULATES EXPECTED NO. IN SAMPLE HAVING VOC. MAJOR
140     J=MPROG(3)*RATIO+.5
        NOUT=J-NPROG(3)
        NSUB=NADD
        NTOT=0
        IF(NOUT)141,165,165
141     IF(IOVER)165,165,142
C--STEP 4 - DELETES SAMPLE MEMBERS CONTRIBUTING TO OVERAGE IN INDIV.
C              VOC. CODE CELLS (LIMIT = PROPORTIONATE SHARE OF VOC.MAJORS)
142     DO 160 IREC=1,NREC
        READ(1'IREC)ICODE,NDX,IGRAD,IYRS,IPROG,IVOC
        IF(NDX)160,160,145
145     IF(MX(ICODE)-4)160,160,146
146     IF(IVOC(1))160,160,147
147     ISEX=((ICODE-1)/15)+1
        DO 149 I=1,5
        IDUM=IVOC(I)
        IF(IDUM)150,150,148
148     IF(IERR(IDUM))160,160,149
149     CONTINUE
150     NDX=-1
        WRITE(1'IREC)ICODE,NDX
        NYRS(IYRS)=NYRS(IYRS)-1
        DO 151 I=1,3
151     NPROG(I)=NPROG(I)-IPROG(I)
        DO 155 I=1,5
        J=IVOC(I)
        IF(J)156,156,152
152     NVOC(J,ISEX)=NVOC(J,ISEX)-1
        IERR(J)=IERR(J)-1
        IOVER=IOVER-1
155     CONTINUE
156     DO 166 I=1,NADD
        IF(INCL(I)-ICODE)166,164,166
164     INCL(I)=0
        NTOT=NTOT+1
        GO TO 167
166     CONTINUE
        NSUB=NSUB+1
        INCL(NSUB)=-ICODE
167     NOUT=NOUT+1
        IF(IOVER)165,165,157
157     IF(NOUT)160,165,165
160     CONTINUE
C--STEP 5 - RE-SETS SAMPLE TO PROPER SIZE + ETHNIC X GPA X SEX MIX
165     NTOT=NSUB-NTOT
        IF(NTOT)190,190,172
```

SAMPLE SELECTION PROGRAM:

SUBROUTINE TRAC1, Page 3

```
172     DO 185 IREC=1,NREC
        READ(1'IREC)ICODE,NDX,IGRAD,IYRS,IPROG
        IF(IPROG(3))174,174,185
174     IDUM=ICODE*NDX
        DO 180 I=1,NSUB
        IF(INCL(I)-IDUM)180,175,180
175     NDX=-NDX
        NYRS(IYRS)=NYRS(IYRS)+NDX
        NPROG(1)=NPROG(1)+(NDX*IPROG(1))
        NPROG(2)=NPROG(2)+(NDX*IPROG(2))
        WRITE(1'IREC)ICODE,NDX
        INCL(I)=0
        NTOT=NTOT-1
        IF(NTOT)190,190,185
180     CONTINUE
185     CONTINUE
C--STEP 6 - ADJUSTS YEARS IN SCHOOL TO MATCH POPULATION
190     MAX=0
        DO 192 I=1,5
        J=MYRS(I)*RATIO+.5
192     LYRS(I)=J-NYRS(I)
        DO 225 IPASS=1,5
        IF(LYRS(IPASS))225,225,194
194     DO 195 I=1,30
195     ICHK(I)=0
        DO 220 IREC=1,NREC
        READ(1'IREC)ICODE,NDX,IGRAD,IYRS,IPROG
        IF(IPROG(3))200,200,220
200     IF(NDX)201,201,205
201     IF(IYRS-IPASS)220,202,220
202     ICHK(ICODE)=IREC
        GO TO 220
205     IF(LYRS(IYRS))207,220,220
207     IF(ICHK(ICODE))220,220,208
208     NDX=-1
        NYRS(IYRS)=NYRS(IYRS)-1
        NPROG(1)=NPROG(1)-IPROG(1)
        NPROG(2)=NPROG(2)-IPROG(2)
        LYRS(IYRS)=LYRS(IYRS)+1
        WRITE(1'IREC)ICODE,NDX
        J=ICHK(ICODE)
        ICHK(ICODE)=0
        READ(1'J)ICODE,NDX,IGRAD,IYRS,IPROG
        NDX=1
        NYRS(IYRS)=NYRS(IYRS)+1
        NPROG(1)=NPROG(1)+IPROG(1)
        NPROG(2)=NPROG(2)+IPROG(2)
        WRITE(1'J)ICODE,NDX
        LYRS(IPASS)=LYRS(IPASS)-1
        IF(LYRS(IPASS))225,225,220
220     CONTINUE
225     CONTINUE
```

SAMPLE SELECTION PROGRAM:

SUBROUTINE TRAC1, Page 4

```
C--STEP 7 - ADJUSTS COLLEGE PREP TO MATCH POPULATION
      NA=MPROG(1)*RATIO+.5
      IF(NA-NPROG(1))231,300,232
231   NADD=2
      NSUB=1
      GO TO 233
232   NADD=1
      NSUB=2
233   DO 234 I=1,120
234   ICHK(I)=0
      DO 250 IREC=1,NREC
      READ(1'IREC)ICODE,NDX,IGRAD,IYRS,IPROG
      IF(IPROG(3))235,235,250
235   IF(IYRS-1)250,250,236
236   JCODE=((IYRS-2)*30)+ICODE
      IF(NDX)241,241,245
241   IF(IPROG(NADD))250,250,242
242   IF(IPROG(NSUB))243,243,250
243   ICHK(JCODE)=IREC
      GO TO 250
245   IF(IPROG(NSUB))250,250,246
246   IF(IPROG(NADD))247,247,250
247   IF(ICHK(JCODE))250,250,248
248   NPROG(NADD)=NPROG(NADD)+1
      NPROG(NSUB)=NPROG(NSUB)-1
      NDX=-1
      WRITE(1'IREC)ICODE,NDX
      J=ICHK(JCODE)
      ICHK(JCODE)=0
      NDX=1
      WRITE(1'J)ICODE,NDX
      IF(NPROG(1)-NA)250,300,250
250   CONTINUE
300   RETURN
      END

FEATURES SUPPORTED
 ONE WORD INTEGERS

CORE REQUIREMENTS FOR TRAC1
 COMMON    680  VARIABLES     190  PROGRAM    1380

RELATIVE ENTRY POINT ADDRESS IS 00CD (HEX)

END OF COMPILATION

// DUP

*STORE      WS  UA  TRAC1
CART ID 0004   DB ADDR  4160   DB CNT   0057
```

SAMPLE SELECTION PROGRAM:

SUBROUTINE TRAC1, Page 5 (end)

```
PAGE   1

// JOB
  0000        0004        0004        0000

V2 M11   ACTUAL  8K  CONFIG  8K

// FOR
**SUBROUTINE TRAC2 PRINTS SAMPLE AND SUMMARY STATISTICS
*LIST SOURCE PROGRAM
*ONE WORD INTEGERS
```

SAMPLE SELECTION PROGRAM:

SUBROUTINE TRAC2, Page 1

```
      SUBROUTINE TRAC2
      DIMENSION ICD(40),ISAMP(20),ITEXT(10,4),IPROG(3),IVOC(5),IOUT(8,5)
     1,JOUT(8),NSEX(2),MSEX(2),PCTX(2),PCT2X(2)
      COMMON NREC,N,NNV,MX(30),NX(30),MYRS(5),NYRS(5),MPROG(3),NPROG(3),
     1MVOC(100,2),NVOC(100,2),JVOC(100,2)
C
C--PRINTS SAMPLE MEMBERS
C
      READ(8,99)ICD
99    FORMAT(40A2)
      WRITE(5,999)ICD
999   FORMAT('1'///' ',40A2)
      DO 304 I=1,30
      NX(I)=0
304   MX(I)=0
      N=0
      IL=0
      DO 310 IREC=1,NREC
      READ(1'IREC)ICODE,NDX,IGRAD,IYRS,IPROG,IVOC
      MX(ICODE)=MX(ICODE)+1
      IF(NDX)310,310,305
305   IL=IL+1
      N=N+1
      ISAMP(IL)=IGRAD
      NX(ICODE)=NX(ICODE)+1
      IF(IL-20)310,306,306
306   WRITE(5,997)ISAMP
997   FORMAT('0',20I6)
      IL=0
310   CONTINUE
      IF(IL)320,320,311
311   WRITE(5,997)(ISAMP(J),J=1,IL)
C
C--LISTS SAMPLE MEMBERS + DESCRIPTIVE CODES
C
320   NPAGE=0
      IL=50
      DO 260 IREC=1,NREC
      READ(1'IREC)ICODE,NDX,IGRAD,IYRS,IPROG,IVOC
      IF(NDX)260,260,241
241   IL=IL+1
      IF(IL-50)240,240,242
242   NPAGE=NPAGE+1
      IL=1
      WRITE(5,998)ICD,NPAGE
998   FORMAT('1'//' ',40A2,8X,'SAMPLE LIST'/' ',80('-'),10X,'PAGE',I2//)
      WRITE(5,9988)
9988  FORMAT(                                            6X,'GRADUATE',10X,
     1'ETHNIC  H.S.'/7X,'NUMBER     SEX     ORIGIN PROGRAM  G.P.A. VOCATIO
     2NAL PROGRAMS'/6X,'---------',4(' -------'),1X,44('-'))
240   ISEX=((ICODE-1)/15)+1
      J=(ISEX-1)*15
      IGPA=((ICODE-J-1)/5)+1
      IETH=ICODE-((ISEX-1)*15)-((IGPA-1)*5)
```

100

SAMPLE SELECTION PROGRAM:

SUBROUTINE TRAC2, Page 2

```
C ROUTINE CHANGES ETHNIC CODES FOR LISTING ONLY
C INPUT CODES (1=BLACK, 2=CAUCASIAN, 3=ORIENTAL, 4=SP.SURNAME, 5=OTHER)
C NEW CODES FOR LISTING (1=BLACK,2=CAUCASIAN, 3=SP.SURNAME, 4=ORIENTAL+OTHER)
      IF(IETH-3)246,243,244
243   IETH=4
      GO TO 246
244   IF(IETH-4)246,245,243
245   IETH=3
C
246   IPR=0
      DO 248 I=1,3
      IF(IPROG(I))248,248,247
247   IPR=1
248   CONTINUE
      DO 249 I=1,8
      DO 249 J=1,5
249   IOUT(I,J)=16448
      DO 255 I=1,5
      IF(IVOC(I))255,255,250
250   K=IVOC(I)
      MZ=JVOC(K,1)
      NZ=JVOC(K,2)
      DO 254 J=1,4
      L=5-J
      MT=MZ/10
      NT=NZ/10
      IOUT(L,I)=((MZ-(MT*10))*256)-4032
      IOUT(L+4,I)=((NZ-(NT*10))*256)-4032
      MZ=MT
254   NZ=NT
255   CONTINUE
      WRITE(5,992)IGRAD,ISEX,IETH,IPR,IGPA,IOUT
992   FORMAT(' ',I10,4I8,3X,5(1X,8A1))
260   CONTINUE
C
C--TABULAR OUTPUT (ALL TABLES PRINT DISTR FOR POP. + SAMPLE)
C           TABLE 1 = 30 SEX X ETHNIC X GPA CATEGORIES
C           TABLE 2 = INDIVIDUAL VOCATIONAL PROGRAMS
C           TABLE 3 = HIGH SCHOOL PROGRAM
C           TABLE 4 = YEARS AT SCHOOL
C
      READ(1'2001)ITEXT
      A=NREC*.01
      B=N*.01
      DO 400 ITAB=1,4
      IF(ITAB-4)321,322,322
321   WRITE(5,999)ICD
322   WRITE(5,996)ITAB,(ITEXT(J,ITAB),J=1,10)
996   FORMAT(//' TABLE -',I2/' ',10A2)
      IF(ITAB-2)324,323,324
323   WRITE(5,981)
981   FORMAT(39X,'---------TOTAL---------',6X,'---------MALE----------
     16X,'---------FEMALE--------')
      WRITE(5,982)NREC,N,MSEX(1),NSEX(1),MSEX(2),NSEX(2)
```

SAMPLE SELECTION PROGRAM:

SUBROUTINE TRAC2, Page 3

```
982   FORMAT(20X,3(19X,'GRADUATING')/31X,3(10X,'CLASS',8X,'SAMPLE')/33X
     13( 7X,'N    PCT.',4X,'N    PCT.')/33X,3(6X,'---  -----',3X,'---  -
     2-----')/33X,3(I9,'  100.0',I6,'  100.0'))
      GO TO 330
324   WRITE(5,983)NREC,N
983   FORMAT(41X,'GRADUATING'/        41x,'  CLASS   ',10X,'SAMPLE'/33X,
     12(9X,'N    PCT.')/33X,2(8X,'---  -----')/33X,2(7X,I4,2X,'100.0'))
      IF(ITAB-3)325,345,350
325   J=0
      MSEX(1)=0
      MSEX(2)=0
      NSEX(1)=0
      NSEX(2)=0
      DO 326 IS=1,2
      DO 326 IG=1,3
      DO 326 IE=1,5
      J=J+1
      MSEX(IS)=MSEX(IS)+MX(J)
      NSEX(IS)=NSEX(IS)+NX(J)
      PCT=MX(J)/A+.05
      PCT2=NX(J)/B+.05
326   WRITE(5,995)IS,IG,IE,MX(J),PCT,NX(J),PCT2
995   FORMAT(    25X,'S',I1,' G',I1,' E',I1,2(I11,F7.1))
      GO TO 400
330   IF(NNV-1)336,336,331
331   IE=NNV-1
      DO 335 I=1,IE
      PCT=JVOC(I,1)*10000.+JVOC(I,2)
      IS=I+1
      DO 335 J=IS,NNV
      PCT2=JVOC(J,1)*10000.+JVOC(J,2)
      IF(PCT-PCT2)335,335,332
332   DO 333 K=1,2
      IG=JVOC(I,K)
      JVOC(I,K)=JVOC(J,K)
      JVOC(J,K)=IG
      IG=MVOC(I,K)
      MVOC(I,K)=MVOC(J,K)
      MVOC(J,K)=IG
      IG=NVOC(I,K)
      NVOC(I,K)=NVOC(J,K)
333   NVOC(J,K)=IG
      PCT=PCT2
335   CONTINUE
336   DO 340 I=1,NNV
      MZ=JVOC(I,1)
      NZ=JVOC(I,2)
      DO 337 J=1,4
      L=5-J
      MT=MZ/10
      NT=NZ/10
      JOUT(L)=((MZ-(MT*10))*256)-4032
      JOUT(L+4)=((NZ-(NT*10))*256)-4032
      MZ=MT
```

SAMPLE SELECTION PROGRAM:

SUBROUTINE TRAC2, Page 4

```
337    NZ=NT
       DO 338 J=1,2
       PCTX(J)=(MVOC(I,J)/(MSEX(J)*.01))+.05
338    PCT2X(J)=(NVOC(I,J)/(NSEX(J)*.01))+.05
       MT=MVOC(I,1)+MVOC(I,2)
       NT=NVOC(I,1)+NVOC(I,2)
       PCT=MT/A+.05
       PCT2=NT/B+.05
340    WRITE(5,994)JOUT,MT,PCT,NT,PCT2,(MVOC(I,J),PCTX(J),NVOC(I,J),
      1PCT2X(J),J=1,2)
994    FORMAT(25X,8A1,3(I9,F7.1,I6,F7.1))
       GO TO 400
345    DO 346 I=1,3
       PCT=MPROG(I)/A+.05
       PCT2=NPROG(I)/B+.05
346    WRITE(5,993)I,MPROG(I),PCT,NPROG(I),PCT2
993    FORMAT(     25X,I8,2(I11,F7.1))
       GO TO 400
350    DO 351 I=1,5
       IS=I-1
       PCT=MYRS(I)/A+.05
       PCT2=NYRS(I)/B+.05
351    WRITE(5,993)IS,MYRS(I),PCT,NYRS(1),PCT2
400    CONTINUE
       RETURN
       END

FEATURES SUPPORTED
 ONE WORD INTEGERS

CORE REQUIREMENTS FOR TRAC2
 COMMON    680  VARIABLES    208  PROGRAM   1786

RELATIVE ENTRY POINT ADDRESS IS 0242 (HEX)

END OF COMPILATION

// DUP

*STORE       WS  UA  TRAC2
CART ID 0004   DB ADDR  41B7   DB CNT   0072
```

SAMPLE SELECTION PROGRAM:

SUBROUTINE TRAC2, Page 5 (end)

```
PAGE   1

// JOB
  0000          0004          0004          0000

V2 M11   ACTUAL  8K   CONFIG  8K

// DUP

*DELETE                 RANDU
CART ID 0004   DB ADDR  3127   DB CNT   0005

// FOR
*LIST SOURCE PROGRAM
*ONE WORD INTEGERS
      SUBROUTINE RANDU(IX,IY,YFL)
      IY=IX*899                                                        RANDU  2
      IF(IY)5,6,6                                                      RANDU  3
    5 IY=IY+32767+1                                                    RANDU  4
    6 YFL=IY                                                           RANDU  5
      YFL=YFL/32767.                                                   RANDU  6
      RETURN                                                           RANDU  7
      END                                                              RANDU  8

FEATURES SUPPORTED
 ONE WORD INTEGERS

CORE REQUIREMENTS FOR RANDU
 COMMON      0  VARIABLES       0  PROGRAM      52

RELATIVE ENTRY POINT ADDRESS IS 0005 (HEX)

END OF COMPILATION

// DUP

*STORE      WS  UA  RANDU
CART ID 0004   DB ADDR  3B25   DB CNT   0005
```

SAMPLE SELECTION PROGRAM:

SUBROUTINE RANDU, Page 1 (end)

```
PAGE   1

// JOB
  0000        0004        0004        0000

V2 M11   ACTUAL  8K  CONFIG  8K

// FOR
**DRAWS COMPLETE SAMPLE FOR PROJECT TRACE - 05/29/74
*LIST SOURCE PROGRAM
*IOCS(2501 READER,1403 PRINTER,DISK)
*ONE WORD INTEGERS
```

105

SAMPLE SELECTION PROGRAM:

MAINLINE PROGRAM, Page 1

```
      DEFINE FILE 1(2004,12,U,KV)
      DIMENSION IZ(476),ISAMP(30),STRT(30),SKIP(30),ITEXT(40),ICHK(30),
     1IVOC(5),KVOC(5),LVOC(5),IPROG(3)
      COMMON NREC,N,NNV,MX(30),NX(30),MYRS(5),NYRS(5),MPROG(3),NPROG(3),
     1MVOC(100,2),NVOC(100,2),JVOC(100,2)
      EQUIVALENCE (ITEXT(2),STRT(1))
      EQUIVALENCE (MX(1),IZ(1)),(NX(1),IZ(31))
      EQUIVALENCE (MYRS(1),IZ(61)),(NYRS(1),IZ(66))
      EQUIVALENCE (MPROG(1),IZ(71)),(NPROG(1),IZ(74))
      EQUIVALENCE (MVOC(1,1),IZ(77)),(NVOC(1,1),IZ(277))
      DATA ISAMP/159,147,147,159,159,133,123,123,133,133,133,112,112,133
     1,133,143,141,141,143,143,135,119,119,135,135,120,111,111,120,120/
      DATA ITEXT/'SE','X ','X ','GP','A ','X ','ET','HN','IC','  ','VO',
     1'CA','TI','ON','AL',' P','RO','GR','AM','  ','HI','GH',' S','CH','
     200','L ','PR','OG','RA','M ','YE','AR','S ','AT',' S','CH','OO','L
     3 ','  ','  '/
      DATA IRAND/13579/
      WRITE(1'2001)ITEXT
C--MX(30),NX(30) = CELL DISTR. (ETHNIC X GPA X SEX) FOR POP. + SAMPLE
C--MYRS(5),NYRS(5) = DISTR. OF YEARS AT SCHOOL FOR POP. + SAMPLE
C--MPROG(3),NPROG(3) = DISTR. OF H.S. MAJOR FOR POP. + SAMPLE
C--MVOC(100),NVOC(100) = DISTR. OF INDIV.VOC. PROGS. FOR POP. + SAMPLE
C--JVOC(100,2) = ACTUAL VOCATIONAL CODES FOR A SCHOOL (UP TO 8 DIGITS)
C--ISAMP(30) = OVERSAMPLING WEIGHTS (X 100)
C--STRT(30) = STARTING POINTS FOR SAMPLE SELECTION
C--SKIP(30) = SKIP NUMBERS FOR SAMPLE SELECTION
C
C--LOADS STUDENT DATA FOR 1 SCHOOL + INCREMENTS MX(IETH,IGPA,ISEX)
C--FOLLOW THE DATA DECK WITH 1 BLANK CARD, THEN A CARD WITH SCHOOL NAME
C
C--NDX = 0 FOR NON-SAMPLE MEMBER, 1 FOR SAMPLE MEMBER
C--NREC = NUMBER OF STUDENTS WITH VALID SEX + ETHNIC + GPA
C--NNV = NUMBER OF DIFFERENT VOCATIONAL COURSES
1     NDX=-1
      NREC=0
      NNV=0
      JVOC(1,1)=0
      JVOC(1,2)=0
      DO 11 I=1,476
11    IZ(I)=0
15    READ(8,99)IGRAD,ISEX,IETH,IGPA,IYRS,IHSP,JHSP,(KVOC(I),LVOC(I),I=1
     1,5)
99    FORMAT(9X,I3,6I1,   5(1X,2I4))
      IF(IGRAD)60,60,21
21    IF(IGPA-4)222,221,221
221   IGPA=3
222   IF(IYRS-5)224,223,223
223   IYRS=4
224   IYRS=IYRS+1
      IF(ISEX*IETH*IGPA)15,15,227
227   DO 228 I=1,3
228   IPROG(I)=0
      IF((1-IHSP)*(IHSP-2))226,225,225
```

SAMPLE SELECTION PROGRAM:

MAINLINE PROGRAM, Page 2

```
225   IPROG(IHSP)=1
226   IF(JHSP-3)230,229,230
229   IPROG(JHSP)=1
230   DO 50 IC=1,5
      IVOC(IC)=0
      IF(KVOC(IC))50,50,45
45    IPROG(3)=1
      DO 48 I=1,NNV
      IF(KVOC(IC)-JVOC(I,1))48,46,48
46    IF(LVOC(IC)-JVOC(I,2))48,47,48
47    IVOC(IC)=I
      MVOC(I,ISEX)=MVOC(I,ISEX)+1
      GO TO 50
48    CONTINUE
      IF(NNV-99)49,49,1111
1111  PAUSE 1111
      GO TO 1
49    NNV=NNV+1
      JVOC(NNV,1)=KVOC(IC)
      JVOC(NNV,2)=LVOC(IC)
      MVOC(NNV,ISEX)=1
      IVOC(IC)=NNV
50    CONTINUE
      NREC=NREC+1
      IF(NREC-2000)57,57,56
56    PAUSE 2000
57    ICODE=((ISEX-1)*15)+((IGPA-1)*5)+IETH
      WRITE(1'NREC)ICODE,NDX,IGRAL,IYRS,IPROG,IVOC
      MX(ICODE)=MX(ICODE)+1
      MYRS(IYRS)=MYRS(IYRS)+1
      DO 58 I=1,3
58    MPROG(I)=MPROG(I)+IPROG(I)
      GO TO 15
C--DETERMINES SAMPLE SIZE (BASED ON SE OF .04 + 20( OF POP. MINIMUM)
C
60    N=(.25*NREC)/((.0016*NREC)+.25)+.95
      PCT=(N*1.)/(NREC*1.)
      IF(PCT-.2)64,65,65
64    N=(NREC*.2)+.95
C
C--DETERMINES REQUIRED MAILING BY SEX X ETHNIC X GPA
C
65    DO 75 I=1,30
      PCT=(MX(I)*1.)/(NREC*1.)
      A=ISAMP(I)*.01
      NTOT=N*PCT*A+.95
C
C--DETERMINES SKIP + START NUMBERS FOR EACH CELL
C
      IF(NTOT-1)69,71,70
69    STRT(I)=9999.
      GO TO 75
70    SKIP(I)=(MX(I)*1.)/(NTOT*1.)
      MAX=SKIP(I)
      GO TO 72
```

SAMPLE SELECTION PROGRAM:

MAINLINE PROGRAM, Page 3

```
71    SKIP(I)=9999.
      MAX=MX(I)
72    CALL RANDU(IRAND,IR,RANDM)
      IRAND=IR
      IR=MAX*RANDM+.5
      IF(IR)72,72,73
73    STRT(I)=IR
75    ICHK(I)=0
C
C--DETERMINES PRELIMINARY SAMPLE MEMBERS + FLAGS IN FILE
C  ALSO UPDATES NX,NYRS,NPROG,NVOC
C
      N=0
      DO 85 IREC=1,NREC
      READ(1'IREC)ICODE,NDX,JGRAD,IYRS,IPROG,IVOC
      ISEX=((ICODE-1)/15)+1
      ICHK(ICODE)=ICHK(ICODE)+1
      IF(ICHK(ICODE)-STRT(ICODE))85,79,79
79    NDX=1
      WRITE(1'IREC)ICODE,NDX
      N=N+1
      STRT(ICODE)=STRT(ICODE)+SKIP(ICODE)
      NYRS(IYRS)=NYRS(IYRS)+1
      DO 80 I=1,3
80    NPROG(I)=NPROG(I)+IPROG(I)
      DO 81 I=1,5
      J=IVOC(I)
      IF(J)82,82,81
81    NVOC(J,ISEX)=NVOC(J,ISEX)+1
82    IF(IPROG(3))83,83,85
83    NX(ICODE)=NX(ICODE)+1
85    CONTINUE
      CALL TRAC1
      CALL TRAC2
1000  CALL EXIT
      END

UNREFERENCED STATEMENTS
 1000

FEATURES SUPPORTED
 ONE WORD INTEGERS
 IOCS

CORE REQUIREMENTS FOR
 COMMON     680  VARIABLES     236  PROGRAM     958

END OF COMPILATION

// XEQ         01

*LOCAL,TRAC1,TRAC2
```

SAMPLE SELECTION PROGRAM:

MAINLINE PROGRAM, Page 4 (end)

```
                                                                         H.S. NAME
    0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8  } CARD
    5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0  } COLUMNS
11752242200112232
1175224220022234 3 14
11752242200322242
11752242200412242
11752242200512112
11752242200612231
11752242200712232
1175224220082224 3 14
1175224220092223 3 14
1175224220101223 3 04
11752242201122341
1175224220122233 3 14
11752242201322332
11752242201412232
11752242201512142
11752242201622332
11752242201712341
11752242201821331
11752242201922332
1175224220201224 3 04       17
1175224220211224 3 14
11752242202222341
11752242202312242
117522422024223413 14
1175224220251223 3 14
1175224220262222 3 14
1175224220272133 3 14
11752242202822112
11752242202922242
11752242203012242
1175224220312224 3 14
1175224220322223 3 14
11752242203312242
11752242203412132
11752242203522232
11752242203612342
11752242203712222
1175224220382222 3 14
117522422039222313 14
11752242204012242
1175224220412223 3 14
11752242204212232
1175224220432221 3 14
11752242204422232
11752242204512232
11752242204612242
1175224220472232 3 14
1175224220481212 3 04
1175224220492234 3 14
11752242205012232
```

SAMPLE SELECTION PROGRAM:

EXAMPLE DATA, Page 1

```
                                                                                    H.S. NAME
        0     1     1     2     2     3     3     4     4     5     5     6     6     7     7     8   } CARD
        5     0     5     0     5     0     5     0     5     0     5     0     5     0     5     0   } COLUMNS
     1175224220512223 3 14
     1175224220522232 3 14
     1175224220532222 3 14
     1175224220541214 2
     1175224220552232 1
     1175224220561212 2
     1175224220571214 2
     117522422058223213 04
     1175224220592234 1
     1175224220602232 3 14
     1175224220611223 3 17
     117522422062223413 14
     1175224220631524 2
     117522422064223413 14
     1175224220652234 3 14
     1175224220662224 3 14
     1175224220671221 2
     1175224220682223 1
     1175224220691233 1
     117522422070223313 14
     1175224220712233 3 14
     1175224220722122 2
     117522422073223313 14
     117522422074223413 14
     1175224220751221 2
     1175224220762224 3 14
     1175224220771224 3 14
     1175224220781234 1
     1175224220792234 1
     1175224220802223 2
     1175224220811233 1
     117522422082223313 14
     1175224220832234 3 14
     1175224220841223 2
     1175224220851224 2
     1175224220861123 2
     1175224220872223 2
     1175224220882224 3 14
     1175224220891433 2
     1175224220901223 2
     1175224220912233 3 14
     1175224220921223 2
     1175224220932223 3 14
     1175224220941223 1
     1175224220952222 3 14
     1175224220962234 3 14
     1175224220972223 3 14
     1175224220982222 3 14
     1175224220991222 2
     1175224221002221 2
```

SAMPLE SELECTION PROGRAM:

EXAMPLE DATA, Page 2

```
                                                                       H.S. NAME
    0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8   CARD
    5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0   COLUMNS
1175224221012224 3 14
11752242210222232
1175224221032222 3 14
11752242210422321
1175224221051224 3 14
1175224221061224 3 14
11752242210712342
11752242210622341
11752242210912212
1175224221102221 3 14
11752242211122321
1175224221122212 3 14
11752242211312321
11752242211412122
11752242211522112
1175224221162232 3 14
1175224221172223 3 04       14010200
11752242211822322
11752242211912122
11752242212012241
11752242212122212
11752242212212232
1175224221232223 3 14
1175224221242224 3 04
11752242212524232
11752242212612232
1175224221271223 3 04
1175224221282222 3 14
11752242212922142
1175224221302424 3 14
117522422131223313 14
11752242213212342
11752242213312132
11752242213412241
11752242213512341
11752242213622322
1175224221372224 3 14
1175224221382221 3 14
1175224221392223 3 14
1175224221402212 3 14
1175224221412223 3 14
1175224221422224 3 14
11752242214312242
1175224221442424 3 14
1175224221452223 3 14
1175224221461223 3 14
117522422147223413 14
1175224221481213 3 17
11752242214912242
1175224221501221 3 04
```

SAMPLE SELECTION PROGRAM:

EXAMPLE DATA, Page 3

```
                                                                       H.S. NAME
    0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8  } CARD
    5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0  } COLUMNS
117522422151223413 14
11752242215212242
11752242215322212
117522422154223313 14
1175224221552223 3 14
1175224221561213 3 17
11752242215712232
117522422158223413 14
11752242215912342
11752242216012232
11752242216112142
11752242216212232
11752242216312212
117522422164222213 14
11752242216522232
11752242216612232
117522422167222413 14
1175224221682224 3 14
1175224221692224 3 14
11752242217022312
11752242217112332
1175224221721211 3 04
11752242217312312
11752242217412332
11752242217512122
11752242217612332
11752242217712142
117522422178123413 14
11752242217912142
11752242218012342
11752242218112132
11752242218222242
1175224221832222 3 14
11752242218424331
1175224221851214 3 17
11752242218622222
11752242218722341
11752242218812332
1175224221892123 3 14
11752242219022232
1175224221912222 3 14
11752242219212331
11752242219312232
1175224221942213 3 14
11752242219512232
11752242219612232
11752242219722242
1175224221982223 3 14
1175224221992222 3 14
11752242220012242
```

SAMPLE SELECTION PROGRAM:

EXAMPLE DATA, Page 4

```
                                                                    H.S. NAME
     0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8   } CARD
     5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0   } COLUMNS
1175224222012331
1175224222022232
1175224222031234 2
1175224222041214 3 04
1175224222051224 2
1175224222061231 2
1175224222072224 2
1175224222081212 2
1175224222091224 3 04
1175224222101433 1
1175224222111223 2
1175224222121423 3 14
1175224222132222 2
1175224222142213 3 04
1175224222151123 3 14
1175224222161223 1
1175224222171223 2
1175224222181221 3 14
1175224222192223 3 14
1175224222202223 3 14
117522422221223313 14
117522422222223413 14
1175224222232234 1
1175224222241234 3 14
1175224222251222 2
1175224222262232 2
1175224222271233 2
1175224222281112 2
117522422229242213 14
1175224222301221 2
1175224222311114 3 19
                                             BLANK CARD
SOME CALIFORNIA HIGH SCHOOL
```

113

SAMPLE SELECTION PROGRAM:

EXAMPLE DATA, Page 5 (end)

2. Sample Name and Address Listing Program

(See Display #6 for Test Data)

```
PAGE   1

// JOB
  0000          0004          0004          0000

V2 M11    ACTUAL  8K  CONFIG  8K

// FOR
**LISTS SAMPLE NAMES AND ADDRESSES
*ONE WORD INTEGERS
*LIST SOURCE PROGRAM
*IOCS(CARD,1132 PRINTER)
```

SAMPLE NAME AND ADDRESS
LISTING PROGRAM: Page 1

```
PAGE   2                LISTS SAMPLE NAMES AND ADDRESSES

      DIMENSION ISCH(40),ID(3),NAME(25),IADD(25),ICIT(17),IZIP(5),IP(12)
     1,IPAR(25)
C
C  LISTS SAMPLE NAMES AND ADDRESSES, 50 PER PAGE
C
C  THE FIRST CARD WILL BE PRINTED AT THE TOP OF EACH PAGE, IT MAY
C  INCLUDE THE SCHOOL NAME, ADDRESS, ETC.
C  A BLANK CARD EXITS FROM THE PROGRAM
C
      IPAGE=0
      NL=50
      READ(2,99)ISCH
99    FORMAT(40A2)
1     READ(2,98)ICD,ID,NAME,IADD
98    FORMAT(I1,8X,3A1,1X,25A1,2X,25A1)
      IF(ICD)100,100,10
10    IF(ICD-4)11,12,11
11    PAUSE
      GO TO 1
12    READ(2,97)ICD,ICIT,IZIP,(IP(I),I=1,3),(IP(J),J=5,7),(IP(K),K=9,12)
     1,IPAR
97    FORMAT(I1,12X,17A1,10X,40A1)
      IF(ICD-5)11,13,11
13    NL=NL+1
      IF(NL-50)15,15,14
14    NL=1
      IPAGE=IPAGE+1
      WRITE(3,96)ISCH,IPAGE
96    FORMAT('1',40A2/' ',95('-'),19X,'PAGE',I2///' NO. STUDENT NAME',15
     1X,'STREET ADDRESS',13X,'CITY/STATE',8X,'ZIP   PHONE',8X,'PARENTS N
     2AME'/
     3' --- ',26('-'),1X,26('-'),1X,17('-'),1X,'----- ',12('-'),1X,25('-
     4')/)
15    IP(4)=16448
      IP(8)=16448
      IF(IP(3)-16448)16,17,16
16    IP(4)=24640
17    IF(IP(7)-16448)18,19,18
18    IP(8)=24640
19    WRITE(3,95)ID,NAME,IADD,ICIT,IZIP,IP,IPAR
95    FORMAT(' ',3A1,1X,25A1,2X,25A1,2X,17A1,1X,5A1,1X,12A1,1X,25A1)
      GO TO 1
100   CALL EXIT
      END

FEATURES SUPPORTED
 ONE WORD INTEGERS
 IOCS

CORE REQUIREMENTS FOR
 COMMON      0  VARIABLES     162  PROGRAM     396

END OF COMPILATION

// XEQ
```

SAMPLE NAME AND ADDRESS
LISTING PROGRAM: Page 2(end)

3. Mailing and Questionnaire Labels Program

and

Test Data

```
PAGE   1

// JOB
  0000         0004         0004         0000

V2 M11   ACTUAL  8K  CONFIG  8K

// FOR
**PRINTS MAILING LABELS
*LIST SOURCE PROGRAM
*ONE WORD INTEGERS
*IOCS(CARD,1132 PRINTER)
```

MAILING and QUESTIONNAIRE
LABEL PROGRAMS:

Page 1

```
PAGE    2               PRINTS MAILING LABELS

      DIMENSION ID(6),NAME(25),IADD(25),ICIT(17),IZIP(5),IP(12)
C
C  PRINTS 2 ENVELOPE LABELS + 2 QUESTIONNAIRE LABELS (WHICH INCLUDE
C  STUDENT IDENTIFICATION NO. + TELEPHONE NO.) FOR EACH STUDENT.
C
C  USE STANDARD FOUR-ACROSS 15/16 X 2-3/4 INCH LABELS
C  A BLANK CARD EXITS FROM THE PROGRAM
C
1     READ(2,99)ICD,ID,NAME,IADD
99    FORMAT(I1,4X,3A1,1X,3A1,1X,25A1,2X,25A1)
      IF(ICD)100,100,10
10    IF(ICD-4)11,12,11
11    PAUSE
      GO TO 1
12    READ(2,98)ICD,ICIT,IZIP,(IP(I),I=1,3),(IP(J),J=5,7),(IP(K),K=9,12)
98    FORMAT(I1,12X,17A1,10X,25A1)
      IF(ICD-5)11,122,11
122   IP(4)=16448
      IP(8)=16448
      IF(IP(3)-16448)13,14,13
13    IP(4)=24640
14    IF(IP(7)-16448)15,16,15
15    IP(8)=24640
16    WRITE(3,97)NAME,NAME,IADD,NAME,IADD,NAME,ICIT,IZIP,IADD,ICIT,IZIP,
     1IADD,ICIT,IZIP,ICIT,IZIP,ID,IP,ID,IP
97    FORMAT(2X,25A1,31X,25A1/2X,4(25A1,3X)/2X,2(17A1,2X,     5A1,4X,25A
     11,3X)/30X,17A1,2X,     5A1,32X,17A1,2X,     5A1/2X,6A1,7X,12A1,31X
     2,6A1,7X,12A1//)
      GO TO 1
100   CALL EXIT
      END

FEATURES SUPPORTED
 ONE WORD INTEGERS
 IOCS

CORE REQUIREMENTS FOR
 COMMON       0  VARIABLES     96  PROGRAM    320

END OF COMPILATION

// XEQ
```

MAILING and QUESTIONNAIRE
LABEL PROGRAMS:

Page 2 (end)

```
    0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8 } CARD
    5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0 } COLUMNS
41752011 032 MARY F ROBERTSON           3524 PARSONS STREET
51752011 032 RAMONA, CA                 915427144871325HARVEY CANERUM
41752011 123 PAULA HOLLAND              5724 VALDEZ ROAD
51752011 123 SALT LAKE CITY,UT          915427144872487JOHN C HARKNESS
41752011 126 JEFFERY MIRANDA            15624 POWERS ROAD
51752011 126 RAMONA         CA          915427144871209JOHN H MONTGOMERY
41752011 139 DORVINA F PACE             13946 TOBIASSON ROAD
51752011 139 RAMONA , CA                915427144875632EZRA D PACE
41752011 145 KONNI K LAYNG              1752 STONE CANYON ROAD
51752011 145 RAMONA, CA                 915427147481072JEFFERY L LAYNG
41752011 213 STEPHAN H DANIELS          7414 LOCKRIDGE COURT
51752011 213 JULIAN, ND                 915427147488942GEORGE L DANIELS
41752011 237 MATHEW E HENSHAW           13609 FRAME ROAD
51752011 237 RAMONA         CA          915427147483554EDWARD HENSHAW
41752011 252 ROBERT S SHANNON           12243 EZRA LANE
51752011 252 JULIAN         ND          915427147483020ROBERT S SHANNON
41752011 254 VICKY K WALLACE            13756 PEQUAT STREET
51752011 254 JULIAN, ND                 915427144871297CLAUDE J JOHNSON
41752011 293 WENDY MOORE                19044 MIRASOL DRIVE
51752011 293 RAMONA , CA                915427147484241KENNETH W MOORE
```

SAMPLE NAME and ADDRESS LISTING, MAIL
and QUESTIONNAIRE LABELS PROGRAMS:

EXAMPLE DATA, Page 1 (end)

BEST COPY AVAILABLE

4. Table Generation Program - Total Class

and

Test Data

```
PAGE    1  08/30/74  TRACE      ATHENA  F4/B2A

**      TRACE TABLE GENERATION PROGRAM--TOTAL CLASS
        DIMENSION         ITBL(60),TBID(8),TBBS(16,10),HEAD(4,20),HM(13),
       1HT(13),HWM(13),IDAT(113),VAR(467,13),HN(16,13),RP(17,13),HSM(13)
       2,TITL(20),IHP(13),STUB(17,10),JTBL(111)
        INTEGER VAR,RP,HM,HT,HWM,HN,HSM
C
C       VARIABLE IDENTIFICATION
C       JTBL=INCREMENTAL VALUE FOR EACH FIELD: JTBL(2)+IDAT(2)=ROW INDEX FOR VAR
C       ITBL=NUMBER OF ROWS IN A TABLE
C       IDAT=CODED QUESTIONNAIRE ITEM (FIELD) DATA
C       VAR=RESPONSE FREQUENCY BY TABLE ROWS (RESPONSE ID) AND COLUMNS
C      1(STUDENT CLASSIFICATIONS)
C       HN=NUMBER OF RESPONDENTS: PERCENTAGE BASE BY TABLE AND COLUMN
C       HM=NUMBER OF MAIL RESPONDENTS
C       HT=NUMBER OF TELEPHONE RESPONDENTS
C       HSM=NUMBER OF MAIL RESPONDENTS IN SCHOOL
C       HWM=NUMBER OF MAIL RESPONDENTS WORKING
C       RP=RESPONSE PERCENTAGES BY TABLE ROWS AND COLUMNS
C       IHP=BASE PERCENTAGE: 100
C       ITEL=TELEPHONE INTERVIEWS IF "14"
C       ISEX=SEX CLASSIFICATION
C       IETH=ETHNIC CLASSIFICATION
C       IPGR=PROGRAM CLASSIFICATION
C       IGPA=GRADE POINT AVERAGE CLASSIFICATION
C       IS,IE,IP,IG=RESPECTIVE INDEX VALUES FOR COLUMN (CLASSIFICATION)ID
C       TBID=TABLE ID (ALPHA)
C       TITL=TABLE TITLE (ALPHA)
C       TBBS=TABLE BASE ID (ALPHA)
C       HEAD=TABLE COLUMN ID (ALPHA)
C       STUB=TABLE ROW ID (ALPHA)
C
      1 FORMAT (5(20I3/),11I3/,2(20I3/),17I3/8A4/16(10A4/),4(20A4))
      2 FORMAT (8X,12I1,I2,2I1,2I2,52I1/8X,4I2,2I1,3I2,4I1,I2,32I1)
      3 FORMAT (20A4/17(10A4,40X))
      4 FORMAT (1H1,8A4,I3,4X,20A4/40X,10A4//4(40X,20A4/)/15X,5HTOTAL,20X
       1,I4,12I6/15X,7HPERCENT,18X,I3,1H ,12(I5,1H )//)
      5 FORMAT(10A4,I4,12I6/40X,I3,1H ,12(I5,1H )/)
      6 FORMAT (I3)
C
C       INITIALIZE VARIABLES
C
        DO 10 I=1,13
        HM(I)=0
        HT(I)=0
        HSM(I)=0
        HWM(I)=0
        IHP(I)=100
        DO 10 J=1,467
     10 VAR(J,I)=0
C
C       READ ROW INDEX INCREMENT (JTBL), TABLE ROW NUMBER (ITBL); TABLE IDENTIFI-
C       CATION, BASES AND COLUMN HEADERS
C
        READ(4,1) (JTBL(I),I=1,111),(ITBL(I),I=1,57),(TBID(I),I=1,8),
       1((TBBS(I,J),J=1,10),I=1,16),((HEAD(I,J),J=1,20),I=1,4)
     11 READ(4,6) ITEL
C
C       READ CLASSIFICATION VALUES AND RESPONSE DATA: COMPUTE ROW AND COLUMN
```

TABLE GENERATION PROGRAM:

Page 1

```
C     INDEXES, MAIL AND TELEPHONE N'S, SCHOOL AND WORKING N'S (MAIL), AND
C     RESPONSE FREQUENCIES
C
      DO 90 NS=1,1000
      READ(4,2) ISEX,IETH,IPRG,IGPA,(IDAT(I),I=1,ITEL)
      IF(ISEX-9)20,12,12
   12 IF(ITEL-14)95,95,11
   20 IS=ISEX+1
      IE=IETH+3
      IP=IPRG+7
      IG=IGPA+10
      IF(ITEL-14)30,30,25
   25 HM(1)=HM(1)+1
      HM(IS)=HM(IS)+1
      HM(IE)=HM(IE)+1
      HM(IP)=HM(IP)+1
      HM(IG)=HM(IG)+1
      GO TO 35
   30 HT(1)=HT(1)+1
      HT(IS)=HT(IS)+1
      HT(IE)=HT(IE)+1
      HT(IP)=HT(IP)+1
      HT(IG)=HT(IG)+1
   35 DO 60 I=1,ITEL
      IF(IDAT(I))60,60,40
   40 IF(ITEL-14)55,55,45
   45 IF(I-2)46,50,55
   46 HSM(1)=HSM(1)+1
      HSM(IS)=HSM(IS)+1
      HSM(IE)=HSM(IE)+1
      HSM(IP)=HSM(IP)+1
      HSM(IG)=HSM(IG)+1
      GO TO 55
   50 HWM(1)=HWM(1)+1
      HWM(IS)=HWM(IS)+1
      HWM(IE)=HWM(IE)+1
      HWM(IP)=HWM(IP)+1
      HWM(IG)=HWM(IG)+1
   55 J=JTBL(I)+IDAT(I)
      VAR(J,1)=VAR(J,1)+1
      VAR(J,IS)=VAR(J,IS)+1
      VAR(J,IE)=VAR(J,IE)+1
      VAR(J,IP)=VAR(J,IP)+1
      VAR(J,IG)=VAR(J,IG)+1
   60 CONTINUE
   61 IF(IDAT(1)-1)90,70,75
   70 J=10
      GO TO 80
   75 J=11
   80 IF(IDAT(2))90,90,85
   85 VAR(J,1)=VAR(J,1)+1
      VAR(J,IS)=VAR(J,IS)+1
      VAR(J,IE)=VAR(J,IE)+1
      VAR(J,IP)=VAR(J,IP)+1
      VAR(J,IG)=VAR(J,IG)+1
   90 CONTINUE
   95 CONTINUE
C
```

TABLE GENERATION PROGRAM:

Page 2

```
C     COMPUTE TABLE BASES BY COLUMN
C
      DO 145 J = 1,13
      VAR(306,J)=VAR(303,J)
      DO 145 I=1,16
      IF(I-1)100,100,105
  100 HN(I,J)=HM(J)+HT(J)
      GO TO 145
  105 IF(I-4)110,111,115
  110 HN(I,J)=VAR(1,J)+VAR(2,J)
      GO TO 145
  111 HN(I,J)=HSM(J)
      GO TO 145
  115 IF(I-5)120,120,125
  120 HN(I,J)=HWM(J)
      GO TO 145
  125 IF(I-9)130,130,135
  130 HN(I,J)=VAR(3,J)+VAR(4,J)
      GO TO 145
  135 IF(I-15)120,120,140
  140 HN(I,J)=HM(J)
  145 CONTINUE
C
C     COMPUTE SPECIAL BASES FOR ROW SUB-CATEGORIES AND PERCENTAGES FOR TABLE
C     FREQUENCIES
C
      JS=1
      DO 340 I = 1,57
      IF(I-15)146,146,147
  146 L=I
      GO TO 148
  147 L=16
  148 IA=0
      JF=ITBL(I)
      DO 330 J=JS,JF
      IF(J-288)149,144,149
  144 IA=0
  149 IA =IA+1
      DO 330 K=1,13
      IF(I-2)285,150,170
  150 IF(J-19)285,155,155
  155 IF(J-22)160,160,285
  160 IF(VAR(18,K))295,295,165
  165 B=VAR(18,K)
      GO TO 299
  170 IF(I-15)285,285,180
  180 IF(I-30)185,185,205
  185 IF(IA-2)285,190,190
  190 IF(IA-5)195,195,285
  195 IF(VAR(JS,K))295,295,200
  200 B=VAR(JS,K)
      GO TO 299
  205 IF(I-35)285,210,225
  210 IF(IA-3)285,285,215
  215 IF(VAR(300,K))295,295,220
  220 B=VAR(300,K)
      GO TO 299
  225 IF(I-36)230,230,245
```

TABLE GENERATION PROGRAM:

Page 3

```
PAGE    4  08/30/74  TRACE      ATHENA  F4/B2A

  230 IF(IA-1)285, 285, 235
  235 IF(VAR(303, K))295, 295, 240
  240 B=VAR(303, K)
      GO TO 299
  245 IF(I-39)285, 250, 281
  250 IF(IA-2)285, 255, 255
  255 IF(IA-4)260, 285, 270
  260 IF(VAR(349, K))295, 295, 265
  265 B=VAR(349, K)
      GO TO 299
  270 IF(IA-6)275, 275, 285
  275 IF(VAR(352, K))295, 295, 280
  280 B=VAR(352, K)
      GO TO 299
  281 IF(I-41)285, 282, 291
  282 GO TO (285, 285, 285, 285, 283, 284, 285, 283, 284, 285, 283, 284), IA
  283 JT=JS+IA-2
  284 IF(VAR(JT, K))295, 295, 286
  285 IF(HN(L, K))295, 295, 290
  290 B=HN(L, K)
      GO TO 299
  286 B=VAR(JT, K)
      GO TO 299
  291 IF(I-42)292, 292, 285
  292 GO TO (285, 283, 284, 285, 283, 284, 285, 283, 284, 285, 283, 284, 285, 283,
     1284), IA
  295 RP(IA, K)=0
      GO TO 330
  299 A=VAR(J, K)
      RP(IA, K)= 100.  * A/B+.5
  300 IF(RP(IA, K))305, 305, 330
  305 IF(VAR(J, K))330, 330, 310
  310 RP(IA, K)=-1
  330 CONTINUE
C
C     READ TABLE TITLES AND ROW RESPONSE IDENTIFICATION
C
  331 READ(4, 3) (TITL(J), J=1, 20), ((STUB(J, K), K=1, 10), J=1, IA)
      WRITE(5, 4) (TBID(J), J=1, 8), I, (TITL(J), J=1, 20), (TBBS(L, J), J=1, 10),
     1((HEAD(J, K), K=1, 20), J=1, 4), (HN(L, K), K=1, 13), (IHP(K), K=1, 13)
      IB=0
      DO 335 J=JS, JF
C
C     WRITE TABLES
C
      IB=IB+1
      WRITE(5, 5) (STUB(IB, K), K=1, 10), (VAR(J, K), K=1, 13),
     1(RP(IB, K), K=1, 13)
      IF(J-287)335, 334, 335
  334 JS=288
      GO TO 331
  335 CONTINUE
  340 JS=ITBL(I)+1
      END
0 ERRORS COMPILATION COMPLETE
/LMGEN, M
```

TABLE GENERATION PROGRAM:

Page 4 (end)

```
PAGE 0001  08/30/74  13:52:57            SPL LIST

 JC01

 JC01
/FINI
/ASSIGN,PI=CR
JC01
/LOAD,LISTR
```

TABLE GENERATION PROGRAM:

EXAMPLE DATA, Page 1

```
PAGE 0001  08/30/74  13:55:38            SPL LIST

        /EXEC
        000002004006008012018023032044049053064080086093099105111117              1 JTBL
        123124128130131135137138142144145149151152156158159163165166              2 JTBL
        170172173177179180184186187191193194198200201205207208212214              3 JTBL
        215219221222226228244260276298301305316332348349351352355366              4 JTBL
        369370372373375376378379381382384385387388390391393397401405              5 JTBL
        409413417421425431437443449455461                                         6 JTBL
        012023032044049053064080086093099105111117123130137144151158              1 ITBL
        165172179186193200207214221228244260276298305316332348355366              2 ITBL
        378393397401405409413417421425431437443449455461467                       3 ITBL
        CAL HIGH 1974 CLASS  TABLE NO.
        BASE = TOTAL
        BASE = IN SCHOOL TOTAL
        BASE = IN SCHOOL TOTAL
        BASE = IN SCHOOL MAIL
        BASE = WORKING MAIL
        BASE = WORKING TOTAL
        BASE = WORKING TOTAL
        BASE = WORKING TOTAL
        BASE = WORKING TOTAL
        BASE = WORKING MAIL
        BASE = WORKING MAIL
        BASE = WORKING MAIL
        BASE = WORKING MAIL
        BASE = WORKING MAIL
        BASE = WORKING MAIL
        BASE = MAIL
              ----SEX---- --ETHNIC BACKGROUND---- --H.S. PROGRAM--- ------G.P.A.-----
                    FE-               SPAN.         COLL.        VOC.
        TOTAL MALE  MALE  BLACK CAUC. NAME  OTHER PREP. GEN'L PREP. 0-1.9 2-2.9 3-4.0
        ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----
        111                                                                         MAIL
        CAL  11 11111    1 1
        CAL  12 11111    1 1
        CAL  21 111212   1 1
        CAL  22 111212   1 1
        CAL  31 111312   614
        CAL  32 111312   614
        CAL  41 11211    614
        CAL  42 11211    614
        CAL  51 112221   624
        CAL  52 112221   624
        CAL  61 112321   2 2
        CAL  62 112321   2 2
        CAL  71 12312  1 2 2
        CAL  72 12312  1 2 2
        CAL  81 1232 1
        CAL  82 1232 1
        CAL  91 1233 1
        CAL  92 1233 1
        CAL 101 1211 1
        CAL 102 1211 1
        CAL 111 1212  1
        CAL 112 1212  1
        CAL 121 22131    1 2
        CAL 122 22131    1 2
        CAL 131 232112   1 1
        CAL 132 232112   1 1
```

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TABLE GENERATION PROGRAM:

EXAMPLE DATA, Page 2

```
PAGE 0002  08/30/74  13:56:23            SPL LIST
         CAL 141 232212   1 6
         CAL 142 232212   1 6
         CAL 151 23231    624
         CAL 152 23231    624
         CAL 161 233121   637
         CAL 162 233121   637
         CAL 171 23322    617
         CAL 172 23322    617
         CAL 181 23332  1 4 6
         CAL 182 23332  1 4 6
         CAL 191 2411  2
         CAL 192 2411  2
         CAL 201 2412  2
         CAL 202 2412  2
         CAL 211 2413 1
         CAL 212 2413 1
                 9

         014                                                                          TELE
         CAL 221111111    1 1
         CAL 2311111212   1 1
         CAL 2411111312   614
         CAL 251111211    614
         CAL 2611112221   624
         CAL 2711112321   2 2
         CAL 281112312  1 2 2
         CAL 29111232 1
         CAL 30111233 1
         CAL 31111211 1
         CAL 32111212  1
         CAL 331122131    1 2
         CAL 3411232112   1 1
         CAL 3511232212   1 6
         CAL 361123231    624
         CAL 3711233121   637
         CAL 381123322    617
         CAL 391123332  1 4 6
         CAL 40112411  2
         CAL 41112412  2
         CAL 42112413 1
                 9
         Q.1 WHAT ARE YOU DOING AT THE PRESENT TIME?
         IN SCHOOL FULL TIME                                                    Q1-1
         IN SCHOOL PART TIME                                                    Q1-2
         WORKING FULL TIME                                                      Q1-3
         WORKING PART TIME                                                      Q1-4
         ARMED FORCES                                                           Q1-5
         HOUSEWIFE                                                              Q1-6
         NOT WORKING, LOOKING FOR JOB                                           Q1-7
         NOT WORKING, NOT LOOKING FOR JOB                                       Q1-8
         OTHER                                                                  Q1-9
         IN SCHOOL FULL TIME + WORKING FT/PT                                    Q1-10
         IN SCHOOL PART TIME + WORKING FT/PT                                    Q1-11
         NA TO Q.1                                                              Q1-12
         Q.2 WHAT TYPE OF SCHOOL ARE YOU ATTENDING?
         4-YEAR COLLEGE/UNIVERSITY                                              Q2-1
         TECHNICAL SCHOOL                                                       Q2-2
         TRADE SCHOOL                                                           Q2-3
```

TABLE GENERATION PROGRAM

EXAMPLE DATA, Page 3

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PAGE 0003  08/30/74  13:57:09            SPL LIST
         PRIVATE BUSINESS SCHOOL                                             Q2-4
         OTHER                                                               Q2-5
         COMMUNITY COLLEGE*                                                  Q2-6
           *PLAN TRANSFER TO 4-YEAR SCHOOL                                   Q2-6-1
           *TWO-YEAR AA PROGRAM ONLY                                         Q2-6-2
           *CERTIFICATE PROGRAM                                              Q2-6-3
           *OTHER/NA PROGRAM                                                 Q2-6-4
         NA TO Q.2 (IF ATTENDING SCHOOL)                                     Q2-7
         Q.3 WHAT IS THE NAME OF THE SCHOOL?
         ANY UNIVERSITY OF CALIFORNIA                                        Q3-1
         ANY CALIFORNIA STATE UNIVERSITY                                     Q3-2
         ANY OTHER CALIFORNIA STATE COLLEGE                                  Q3-3
         ANY CALIFORNIA COMMUNITY COLLEGE                                    Q3-4
         ANY CALIF. PRIVATE UNIVERSITY/COLLEGE                               Q3-5
         OTHER CALIFORNIA SCHOOL                                             Q3-6
         U.S.A. SCHOOL OUTSIDE OF CALIFORNIA                                 Q3-7
         FOREIGN SCHOOL                                                      Q3-8
         NA TO Q.3 (IF ATTENDING SCHOOL)
         Q.4 WHAT IS YOUR MAJOR SUBJECT?
         SOCIAL SCIENCES-SOC./PSYCH/POLI SCI.                                Q4-1
         PHYSICAL SCIENCES-PHYSICS/CHEM/MATH                                 Q4-2
         BIOLOGICAL SCIENCES-BIOL/PRE MED-DENT                               Q4-3
         EDUCATION/PHYS.ED./SCHOOL ADMINISTRATN                              Q4-4
         ENGINEERING                                                         Q4-5
         ENGLISH/HUMANITIES/LITERATURE/FOR.LANG.                             Q4-6
         ART/MUSIC/ACTING/THEATRE ARTS                                       Q4-7
         BUSINESS/LAW                                                        Q4-8
         POLICE SCIENCE/FIRE SCIENCE/FORESTRY                                Q4-9
         OTHER MAJOR                                                         Q4-10
         NO MAJOR                                                            Q4-11
         NA TO Q.4 (IF ATTENDING SCHOOL)                                     Q4-12
         /ENDJOB
```

TABLE GENERATION PROGRAM:

EXAMPLE DATA, Page 4 (end)

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PAGE 0001  09/04/74  04:33:23  ANEW       SPL LIST

Q 1 WHAT ARE YOU DOING AT THE PRESENT TIME?
IN SCHOOL FULL TIME                                                     Q1-1
IN SCHOOL PART TIME                                                     Q1-2
WORKING FULL TIME                                                       Q1-3
WORKING PART TIME                                                       Q1-4
ARMED FORCES                                                            Q1-5
HOUSEWIFE                                                               Q1-6
NOT WORKING, LOOKING FOR JOB                                            Q1-7
NOT WORKING, NOT LOOKING FOR JOB                                        Q1-8
OTHER                                                                   Q1-9
IN SCHOOL FULL TIME + WORKING FT/PT                                     Q1-10
IN SCHOOL PART TIME + WORKING FT/PT                                     Q1-11
NA TO Q 1                                                               Q1-12
Q 2 WHAT TYPE OF SCHOOL ARE YOU ATTENDING?
4-YEAR COLLEGE/UNIVERSITY                                               Q2-1
TECHNICAL SCHOOL                                                        Q2-2
TRADE SCHOOL                                                            Q2-3
PRIVATE BUSINESS SCHOOL                                                 Q2-4
OTHER                                                                   Q2-5
COMMUNITY COLLEGE*                                                      Q2-6
  *PLAN TRANSFER TO 4-YEAR SCHOOL                                       Q2-6-1
  *TWO-YEAR AA PROGRAM ONLY                                             Q2-6-2
  *CERTIFICATE PROGRAM                                                  Q2-6-3
  *OTHER/NA PROGRAM                                                     Q2-6-4
NA TO Q 2 (IF ATTENDING SCHOOL)                                         Q2-7
Q 3 WHAT IS THE NAME OF THE SCHOOL?
ANY UNIVERSITY OF CALIFORNIA                                            Q3-1
ANY CALIFORNIA STATE UNIVERSITY                                         Q3-2
ANY OTHER CALIFORNIA STATE COLLEGE                                      Q3-3
ANY CALIFORNIA COMMUNITY COLLEGE                                        Q3-4
ANY CALIF PRIVATE UNIVERSITY/COLLEGE                                    Q3-5
OTHER CALIFORNIA SCHOOL                                                 Q3-6
U S A  SCHOOL OUTSIDE OF CALIFORNIA                                     Q3-7
FOREIGN SCHOOL                                                          Q3-8
NA TO Q 3 (IF ATTENDING SCHOOL)
Q 4 WHAT IS YOUR MAJOR SUBJECT?
SOCIAL SCIENCES-SOC /PSYCH/POLI SCI                                     Q4-1
PHYSICAL SCIENCES-PHYSICS/CHEM/MATH                                     Q4-2
BIOLOGICAL SCIENCES-BIOL/PRE MED-DENT                                   Q4-3
EDUCATION/PHYS ED /SCHOOL ADMINISTRATN                                  Q4-4
ENGINEERING                                                             Q4-5
ENGLISH/HUMANITIES/LITERATURE/FOR LANG                                  Q4-6
ART/MUSIC/ACTING/THEATRE ARTS                                           Q4-7
BUSINESS/LAW                                                            Q4-8
POLICE SCIENCE/FIRE SCIENCE/FORESTRY                                    Q4-9
OTHER MAJOR                                                             Q4-10
NO MAJOR                                                                Q4-11
NA TO Q 4 (IF ATTENDING SCHOOL)                                         Q4-12
Q 5 WHICH OF THE FOLLOWING IS YOUR PRESENT JOB SITUATION?
UNEMPLOYED, BUT LOOKING FOR A JOB                                       Q5-1
IN AN APPRENTICESHIP PROGRAM                                            Q5-2
RECEIVING ON-THE-JOB TRAINING                                           Q5-3
IN A JOB I AM FULLY QUALIFIED FOR                                       Q5-4
NA TO Q 5 (IF WORKING/LOOKING FOR JOB)
Q 6 WHICH STMT BEST DESCRIBES YOUR JOB OR, IF UNEMPL, THE JOB YOU'RE LOOKING FOR
REC'D SPECIFIC H S  TRAINING FOR JOB                                    Q6-1
IN A FIELD RELATED TO H S  TRAINING                                     Q6-2
IN A FIELD UNRELATED TO H S  TRAINING                                   Q6-3
```

TABLE GENERATION PROGRAM:

TABLE TEXT, Page 1

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PAGE 0002  09/04/74  04:34:21  ANEW      SPL LIST

NA TO Q.6 (IF WORKING/LOOKING FOR JOB)
Q.7 WHAT TYPE OF BUSINESS OR INDUSTRY ARE YOU EMPLOYED IN?
AEROSPACE                                                          Q7-1
AGRICULTURE                                                        Q7-2
CONSTRUCTION                                                       Q7-3
FINANCE/REAL ESTATE                                                Q7-4
GOVERNMENT                                                         Q7-5
MANUFACTURING                                                      Q7-6
TRANSPORTATION/COMMUNICATIONS                                      Q7-7
WHOLESALE/RETAIL MERCHANDISING                                     Q7-8
SERVICE INDUSTRY                                                   Q7-9
OTHER INDUSTRY                                                     Q7-10
NA TO Q.7 (IF WORKING)
Q.8 WHAT IS YOUR JOB TITLE/OCCUPATION
SOCIAL SCIENCES/HUMANITIES/ETC.                                    Q8-1
PHYSICAL SCIENCES/COMPUTER OPER./ENGNG                             Q8-2
MEDICINE/MD/DDS/RN/BIOLOGICAL SCIENCES                             Q8-3
EDUCATION/TEACHING/SCHOOL ADMINISTRATN                             Q8-4
LAW ENFORCEMENT/POLICE/FIRE/FORESTRY                               Q8-5
LAW/LAWYER                                                         Q8-6
ARTIST/MUSICIAN/DANCER/WRITER/JOURN/ETC                            Q8-7
BUSINESS/MANAGEMENT/ACCOUNTING/PROPRIET                            Q8-8
GEN.OFFICE/CLERICAL/BOOKKEEPER/TELLER                              Q8-9
SALES                                                              Q8-10
SKILLED LABOR/TRADES/MECH./BEAUT/BARBER                            Q8-11
SEMI-SKILL LABOR/MACH.OPERATOR/TRUCK DR                            Q8-12
UNSKILLED LABOR/MAID/JANITOR/ETC.                                  Q8-13
RESTAURANT WORKER/WAITRESS/BUS BOY                                 Q8-14
HOUSEWIFE/OTHER OCCUPATION                                         Q8-15
NA TO Q.8 (IF WORKING)
Q.9 HOW FAR FROM YOUR HIGH SCHOOL IS YOUR PLACE OF EMPLOYMENT?
0-10 MILES                                                         Q9-1
11-25 MILES                                                        Q9-2
26-50 MILES                                                        Q9-3
50-100 MILES                                                       Q9-4
MORE THAN 100 MILES                                                Q9-5
NA TO Q.9 (IF WORKING)
Q.10 WHO HELPED YOU GET YOUR JOB?
PARENTS, RELATIVES, FRIENDS                                        Q10-1
HIGH SCHOOL VOCATIONAL COUNSELOR                                   Q10-2
GOT IT ON MY OWN                                                   Q10-3
PRIVATE EMPLOYMENT AGENCY                                          Q10-4
STATE/PUBLIC EMPLOYMENT AGENCY                                     Q10-5
OTHER HELP                                                         Q10-6
NA TO Q.10 (IF WORKING)
Q.11-1 INDICATE AGREEMENT WITH THE STMT. 'THE WORK IS INTERESTING TO ME'
STRONGLY DISAGREE                                                  Q11-1-1
DISAGREE                                                           Q11-1-2
NOT SURE/UNDECIDED                                                 Q11-1-3
AGREE                                                              Q11-1-4
STRONGLY AGREE                                                     Q11-1-5
NA TO Q.11-1 (IF WORKING)
Q.11-2 INDICATE AGREEMENT WITH THE STMT. 'MY CHANCES FOR ADVANCEMENT ARE GOOD'
STRONGLY DISAGREE                                                  Q11-2-1
DISAGREE                                                           Q11-2-2
NOT SURE/UNDECIDED                                                 Q11-2-3
AGREE                                                              Q11-2-4
STRONGLY AGREE                                                     Q11-2-5
```

TABLE GENERATION PROGRAM:

TABLE TEXT, Page 2

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PAGE 0003  09/04/74  04:35:19  ANEW      SPL LIST

NA TO Q.11-2 (IF WORKING)
Q.11-3 INDICATE AGREEMENT WITH THE STMT  'PAY IS GOOD,CONSIDERING MY TRNG.& EXP'
STRONGLY DISAGREE                                                    Q11-3-1
DISAGREE                                                             Q11-3-2
NOT SURE/UNDECIDED                                                   Q11-3-3
AGREE                                                                Q11-3-4
STRONGLY AGREE                                                       Q11-3-5
NA TO Q.11-3 (IF WORKING)
Q.11-4 INDICATE AGREEMENT WITH THE STMT. 'I AM SATISFIED WITH JOB AT THIS STAGE'
STRONGLY DISAGREE                                                    Q11-4-1
DISAGREE                                                             Q11-4-2
NOT SURE/UNDECIDED                                                   Q11-4-3
AGREE                                                                Q11-4-4
STRONGLY AGREE                                                       Q11-4-5
NA TO Q.11-4 (IF WORKING)
Q.11-5 INDICATE AGREEMENT WITH THE STMT. 'JOB IS RELATED TO ULTIMATE OCC. OBJT.'
STRONGLY DISAGREE                                                    Q11-5-1
DISAGREE                                                             Q11-5-2
NOT SURE/UNDECIDED                                                   Q11-5-3
AGREE                                                                Q11-5-4
STRONGLY AGREE                                                       Q11-5-5
NA TO Q.11-5 (IF WORKING)
Q.12-1 INDICATE EXPERIENCE WITH H.S. COURSES IN **ART/MUSIC**
TOOK 1 OR MORE COURSES IN THESE AREAS*                               Q12-1-1
   *NOT USEFUL IN PRESENT ACTIVITY                                   Q12-1-1-1
   *SOMEWHAT USEFUL IN PRESENT ACTIVITY                              Q12-1-1-2
   *VERY USEFUL IN PRESENT ACTIVITY                                  Q12-1-1-3
   *NA HOW USEFUL IN PRESENT ACTIVITY                                Q12-1-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                   Q12-1-2
NA TO Q.12-1                                                         Q12-1-3
Q.12-2 INDICATE EXPERIENCE WITH H.S. COURSES IN **DRAMA/SPEECH**
TOOK 1 OR MORE COURSES IN THESE AREAS*                               Q12-2-1
   *NOT USEFUL IN PRESENT ACTIVITY                                   Q12-2-1-1
   *SOMEWHAT USEFUL IN PRESENT ACTIVITY                              Q12-2-1-2
   *VERY USEFUL IN PRESENT ACTIVITY                                  Q12-2-1-3
   *NA NOW USEFUL IN PRESENT ACTIVITY                                Q12-2-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                   Q12-2-2
NA TO Q.12-2                                                         Q12-2-3
Q.12-3 INDICATE EXPERIENCE WITH H.S. COURSES IN **ENGLISH/LITERATURE/WRITING**
TOOK 1 OR MORE COURSES IN THESE AREAS*                               Q12-3-1
   *NOT USEFUL IN PRESENT ACTIVITY                                   Q12-3-1-1
   *SOMEWHAT USEFUL IN PRESENT ACTIVITY                              Q12-3-1-2
   *VERY USEFUL IN PRESENT ACTIVITY                                  Q12-3-1-3
   *NA HOW USEFUL IN PRESENT ACTIVITY                                Q12-3-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                   Q12-3-2
NA TO Q.12-3                                                         Q12-3-3
Q.12-4 INDICATE EXPERIENCE WITH H.S. COURSES IN **FOREIGN LANGUAGE**
TOOK 1 OR MORE COURSES IN THIS AREA*                                 Q12-4-1
   *NOT USEFUL IN PRESENT ACTIVITY                                   Q12-4-1-1
   *SOMEWHAT USEFUL IN PRESENT ACTIVITY                              Q12-4-1-2
   *VERY USEFUL IN PRESENT ACTIVITY                                  Q12-4-1-3
   *NA HOW USEFUL IN PRESENT ACTIVITY                                Q12-4-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                   Q12-4-2
NA TO Q.12-4                                                         Q12-4-3
Q.12-5 INDICATE EXPERIENCE WITH H.S. COURSES IN **MATHEMATICS**
TOOK 1 OR MORE COURSES IN THIS AREA*                                 Q12-5-1
   *NOT USEFUL IN PRESENT ACTIVITY                                   Q12-5-1-1
   *SOMEWHAT USEFUL IN PRESENT ACTIVITY                              Q12-5-1-2
```

TABLE GENERATION PROGRAM:

TABLE TEXT, Page 3

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PAGE 0004  09/04/74  04:36:16  ANEW       SPL LIST
  *VERY USEFUL IN PRESENT ACTIVITY                                          Q12-5-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                        Q12-5-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                          Q12-5-2
NA TO Q 12-5                                                                Q12-5-3
Q 12-6 INDICATE EXPERIENCE WITH H S  COURSES IN **SCIENCE**
TOOK 1 OR MORE COURSES IN THIS AREA*                                        Q12-6-1
  *NOT USEFUL IN PRESENT ACTIVITY                                           Q12-6-1-1
  *SOMEWHAT USEFUL IN PRESENT ACTIVITY                                      Q12-6-1-2
  *VERY USEFUL IN PRESENT ACTIVITY                                          Q12-6-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                        Q12-6-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                          Q12-6-2
NA TO Q 12-6                                                                Q12-6-3
Q 12-7 INDICATE EXPERIENCE WITH H S  COURSES IN **SOCIAL STUDIES**
TOOK 1 OR MORE COURSES IN THIS AREA*                                        Q12-7-1
  *NOT USEFUL IN PRESENT ACTIVITY                                           Q12-7-1-1
  *SOMEWHAT USEFUL IN PRESENT ACTIVITY                                      Q12-7-1-2
  *VERY USEFUL IN PRESENT ACTIVITY                                          Q12-7-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                        Q12-7-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                          Q12-7-2
NA TO Q 12-7                                                                Q12-7-3
Q 12-8 INDICATE EXPERIENCE WITH H S  COURSES IN **AGRICULTURE/HORT /FORESTRY**
TOOK 1 OR MORE COURSES IN THESE AREAS*                                      Q12-8-1
  *NOT USEFUL IN PRESENT ACTIVITY                                           Q12-8-1-1
  *SOMEWHAT USEFUL IN PRESENT ACTIVITY                                      Q12-8-1-2
  *VERY USEFUL IN PRESENT ACTIVITY                                          Q12-8-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                       Q12-8-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                          Q12-8-2
NA TO Q 12-8                                                                Q12-8-3
Q 12-9 INDICATE EXPERIENCE WITH H S  COURSES IN **BUSINESS/OFFICE PRACTICES**
TOOK 1 OR MORE COURSES IN THESE AREAS*                                      Q12-9-1
  *NOT USEFUL IN PRESENT ACTIVITY                                           Q12-9-1-1
  *SOMEWHAT USEFUL IN PRESENT ACTIVITY                                      Q12-9-1-2
  *VERY USEFUL IN PRESENT ACTIVITY                                          Q12-9-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                        Q12-9-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                          Q12-9-2
NA TO Q 12-9                                                                Q12-9-3
Q 12-10 INDICATE EXPERIENCE WITH H S  COURSES IN **DISTRIB ED /MCHDSING/SALES**
TOOK 1 OR MORE COURSES IN THESE AREAS*                                      Q12-10-1
  *NOT USEFUL IN PRESENT ACTIVITY                                           12-10-1-1
  *SOMEWHAT USEFUL IN PRESENT ACTIVITY                                      12-10-1-2
  *VERY USEFUL IN PRESENT ACTIVITY                                          12-10-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                        12-10-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                          Q12-10-2
NA TO Q 12-10                                                               Q12-10-3
Q 12-11 INDICATE EXPERIENCE WITH H S  COURSES IN **HEALTH/MEDICAL/HOSPITAL**
TOOK 1 OR MORE COURSES IN THESE AREAS*                                      Q12-11-1
  *NOT USEFUL IN PRESENT ACTIVITY                                           12-11-1-1
  *SOMEWHAT USEFUL IN PRESENT ACTIVITY                                      12-11-1-2
  *VERY USEFUL IN PRESENT ACTIVITY                                          12-11-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                        12-11-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                          Q12-11-2
NA TO Q 12-11                                                               Q12-11-3
Q 12-12 INDICATE EXPERIENCE WITH H S  COURSES IN **HOME ECONOMICS/CONSUMER ED**
TOOK 1 OR MORE COURSES IN THESE AREAS*                                      Q12-12-1
  *NOT USEFUL IN PRESENT ACTIVITY                                           12-12-1-1
  *SOMEWHAT USEFUL IN PRESENT ACTIVITY                                      12-12-1-2
  *VERY USEFUL IN PRESENT ACTIVITY                                          12-12-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                        12-12-1-4
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TABLE GENERATION PROGRAM:

TABLE TEXT, Page 4

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PAGE 0005  09/04/74  04:37:16  ANEW      SPL LIST

WISH I HAD TAKEN SOME/MORE COURSES                                               Q12-12-2
NA TO Q. 12-12                                                                   Q12-12-3
Q. 12-13 INDICATE EXPERIENCE WITH H.S.  COURSES IN **INDUST./TECH./TRADE SKILLS**
TOOK 1 OR MORE COURSES IN THESE AREAS*                                           Q12-13-1
  *NOT USEFUL IN PRESENT ACTIVITY                                                12-13-1-1
  *SOMEWHAT USEFUL IN PRESENT ACTIVITY                                           12-13-1-2
  *VERY USEFUL IN PRESENT ACTIVITY                                               12-13-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                             12-13-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                               Q12-13-2
NA TO Q. 12-13                                                                   Q12-13-3
Q. 12-14 INDICATE EXPERIENCE WITH H.S.  COURSES IN **WORK EXPERIENCE PROGRAMS**
TOOK 1 OR MORE COURSES IN THIS AREA*                                             Q12-14-1
  *NOT USEFUL IN PRESENT ACTIVITY                                                12-14-1-1
  *SOMEWHAT USEFUL IN PRESENT ACTIVITY                                           12-14-1-2
  *VERY USEFUL IN PRESENT ACTIVITY                                               12-14-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                             12-14-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                               Q12-14-2
NA TO Q. 12-14                                                                   Q12-14-3
Q. 12-15 INDICATE EXPERIENCE WITH H.S.  COURSES IN **PHYSICAL EDUCATION**
TOOK 1 OR MORE COURSES IN THIS AREA*                                             Q12-15-1
  *NOT USEFUL IN PRESENT ACTIVITY                                                12-15-1-1
  *SOMEWHAT USEFUL IN PRESENT ACTIVITY                                           12-15-1-2
  *VERY USEFUL IN PRESENT ACTIVITY                                               12-15-1-3
  *NA HOW USEFUL IN PRESENT ACTIVITY                                             12-15-1-4
WISH I HAD TAKEN SOME/MORE COURSES                                               Q12-15-2
NA TO Q. 12-15                                                                   Q12-15-3
Q. 13-1 WHICH SUBJECT AREA IS MOST USEFUL FOR YOUR PRESENT ACTIVITY?
ART/MUSIC                                                                        Q13-1-1
DRAMA/SPEECH                                                                     Q13-1-2
ENGLISH/LITERATURE/WRITING                                                       Q13-1-3
FOREIGN LANGUAGE                                                                 Q13-1-4
MATHEMATICS                                                                      Q13-1-5
SCIENCE                                                                          Q13- 1-6
SOCIAL STUDIES                                                                   Q13- 1-7
AGRICULTURE/HORTICULTURE/FORESTRY                                                Q13-1-8
BUSINESS AND OFFICE PRACTICES                                                    Q13-1-9
DISTRIBUTIVE EDU./MERCHANDISING/SALES                                            Q13-1-10
HEALTH/MEDICAL/HOSPITAL                                                          Q13-1-11
HOME ECONOMICS/CONSUMER EDUCATION                                                Q13-1-12
INDUSTRIAL/TECHNICAL/TRADE SKILLS                                                Q13-1-13
WORK EXPERIENCE                                                                  Q13-1-14
PHYSICAL EDUCATION                                                               Q13-1-15
NA TO Q. 13-1                                                                    Q13-1-16
Q. 13-2 WHICH SUBJECT AREA IS SECOND MOST USEFUL FOR YOUR PRESENT ACTIVITY?
ART MUSIC                                                                        Q13-2-1
DRAMA/SPEECH                                                                     Q13-2-2
ENGLISH/LITERATURE/WRITING                                                       Q13-2-3
FOREIGN LANGUAGE                                                                 Q13-2-4
MATHEMATICS                                                                      Q13-2-5
SCIENCE                                                                          Q13-2-6
SOCIAL STUDIES                                                                   Q13-2-7
AGRICULTURE/HORTICULTURE/FORESTRY                                                Q13-2-8
BUSINESS AND OFFICE PRACTICES                                                    Q13-2-9
DISTRIBUTIVE EDU./MERCHANDISING/SALES                                            Q13-2-10
HEALTH/MEDICAL/HOSPITAL                                                          Q13-2-11
HOME ECONOMICS/CONSUMER EDUCATION                                                Q13-2-12
INDUSTRIAL/TECHNICAL/TRADE SKILLS                                                Q13-2-13
WORK EXPERIENCE                                                                  Q13-2-14
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TABLE GENERATION PROGRAM:

TABLE TEXT, Page 5

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PAGE 0006  09/04/74  04 38 15  ANEW       SPL LIST

PHYSICAL EDUCATION                                                    Q13-2-15
NA TO Q 13-2                                                          Q13-2-16
Q 13-3 WHICH SUBJECT AREA IS THIRD MOST USEFUL FOR YOUR PRESENT ACTIVITY?
ART/MUSIC                                                             Q13-3-1
DRAMA/SPEECH                                                          Q13-3-2
ENGLISH/LITERATURE/WRITING                                            Q13-3-3
FOREIGN LANGUAGE                                                      Q13-3-4
MATHEMATICS                                                           Q13-3-5
SCIENCE                                                               Q13-3-6
SOCIAL STUDIES                                                        Q13-3-7
AGRICULTURE/HORTICULTURE/FORESTRY                                     Q13-3-8
BUSINESS AND OFFICE PRACTICES                                         Q13-3-9
DISTRIBUTIVE EDU /MERCHANDISING/SALES                                 Q13-3-10
HEALTH/MEDICAL/HOSPITAL                                               Q13-3-11
HOME ECONOMICS/CONSUMER EDUCATION                                     Q13-3-12
INDUSTRIAL/TECHNICAL/TRADE SKILLS                                     Q13-3-13
WORK EXPERIENCE                                                       Q13-3-14
PHYSICAL EDUCATION                                                    Q13-3-15
NA TO Q 13-3                                                          Q13-3-16
Q 14 SPECIFIC COURSES YOU WISH YOU HAD TAKEN/BEEN OFFERED IN H S
BUSINESS SUBJECTS/COURSES (UNSPECIFIED)                               Q14-1
SECRETARIAL/STENO/TYPING/OFFICE PRACT                                 Q14-2
BOOKKEEPING/ACCOUNTING                                                Q14-3
WORK EXPERIENCE PROGRAM                                               Q14-4
PHYSICS/CHEMISTRY/BIOLOGY/ADVANCED SCI                                Q14-5
AGRI /HORTICULTURE/FORESTRY/WILD LIFE                                 Q14-6
SOCIOLOGY/PSYCHOLOGY/PHILOSOPHY                                       Q14-7
MUSIC/VOCAL MUSIC/PIANO/MUSIC THEORY                                  Q14-8
FOREIGN LANGUAGE/GERMAN/SPANISH/LATIN                                 Q14-9
MEDICAL/HEALTH/NURSING/FIRST AID                                      Q14-10
ALGEBRA/TRIG/GEOMETRY/CALCULUS                                        Q14-11
Q 14(CTD) SPECIFIC COURSES YOU WISH YOU HAD TAKEN/BEEN OFFERED IN H S
MATH/MORE MATH (UNSPECIFIED)                                          Q14-12
AUTO SHOP/BODY & FENDER/MECHANICS/M-CYC                               Q14-13
DATA PROCESSING/COMP PROG /KEYPUNCH                                   Q14-14
LITERATURE/ENG /AMER /ADV /SHAKESPEARE                                Q14-15
SALES/MERCHANDISING/ADVERTISING                                       Q14-16
SPEECH/DRAMA/ACTING/PUBLIC SPEAKING                                   Q14-17
ART/CRAFTS/CERAMICS/JEWELRY/PHOTOGRAPHY                               Q14-18
ENGLISH GRAMMAR/VOCAB/SPELLING/BASICS                                 Q14-19
TRADE SKILLS/TECH/INDUST/OCCU/VOC SKILLS                              Q14-20
OTHER COURSES                                                         Q14-21
NA TO Q 14                                                            Q14-22
Q 15 WHAT EDUCATIONAL PROGRAM WOULD YOU TAKE NOW IF YOU HAD IT TO DO AGAIN?
SAME PROGRAM I TOOK BEFORE                                            Q15-1-1
A DIFFERENT PROGRAM*                                                  Q15-1-2
NA TO Q 15                                                            Q15-1-3
  *IF DIFFERENT  COLLEGE PREP                                         15-1-2-1
                 VOCATIONAL                                           15-1-2-2
                 OTHER                                                15-1-2-3
                 NA WHAT PROGRAM TYPE                                 15-1-2-4
Q 15(CTD) WHAT TYPE OF VOCATIONAL PROGRAM WOULD YOU TAKE?
WHAT TYPE VOCATIONAL PROGRAM*                                         Q15-2-1
  *BUSINESS/BUS COURSES (UNSPECIFIED)                                 15-2-1-1
  *SECRETARY/STENO/TYPIST/OFF. PRACTICE                               15-2-1-2
  *IND ARTS/AUTO/MACHINE/WOOD SHOP                                    15-2-1-3
  *ENGINEERING/ELECTRONICS/COMPUTER                                   15-2-1-4
  *ART/MUSIC                                                          15-2-1-5
```

TABLE GENERATION PROGRAM:

TABLE TEXT, Page 6

```
PAGE 0007  09/04/74  04:39:14  ANEW      SPL LIST
   *FORESTRY/AGRICULTURE
   *HEALTH/MEDICAL/HOSP./NURSING                                  15-2-1-6
   *HOME ECONOMICS/SERVING/COOKING                                15-2-1-7
   *OTHER VOCATIONAL PROGRAM                                      15-2-1-8
   *NA TYPE VOCATIONAL PROGRAM                                    15-2-1-9
Q.16 WHAT WAS YOUR OCCUPATIONAL CHOICE WHEN YOU WERE IN H.S.?     15-2-1-10
SOCIAL SCIENCES/HUMANITIES/PSYCH/ETC.
PHYSICAL SCIENCES/ENGINEER/COMPUTER                               Q16-1
BIOLOGICAL SCIENCES/MD/DDS/RN/MEDICINE                            Q16-2
EDUCATION/TEACHING/SCHOOL ADMINISTRATN                            Q16-3
LAW ENFORCEMENT/POLICE/FIRE/FORESTRY                              Q16-4
LAW/LAWYER                                                        Q16-5
ARTIST/MUSICIAN/DANCER/WRITER/JOURN/ETC                           Q16-6
BUSINESS/MANAGEMENT/ACCOUNTING/PROPRIET                           Q16-7
GEN.OFFICE/CLERICAL/BOOKKEEPER/TELLER                             Q16-8
SALES                                                             Q16-9
SKILLED LABOR/TRADES/MECH./BEAUT/BARBER                           Q16-10
SEMI-SKILL LABOR/MACH.OPERATOR/TRUCK DR                           Q16-11
UNSKILLED LABOR/MAID/JANITOR/ETC.                                 Q16-12
RESTAURANT WORKER/WAITRESS/BUSBOY                                 Q16-13
HOUSEWIFE/OTHER OCCUPATION                                        Q16-14
NO CHOICE/NA TO Q.16                                              Q16-15
Q.17 WHAT IS YOUR OCCUPATIONAL CHOICE NOW?                        Q16-16
SOCIAL SCIENCES/HUMANITIES/PSYCH/ETC.
PHYSICAL SCIENCES/ENGINEER/COMPUTER                               Q17-1
BIOLOGICAL SCIENCES/MD/DDS/RN/MEDICINE                            Q17-2
EDUCATION/TEACHING/SCHOOL ADMINISTRATN                            Q17-3
LAW ENFORCEMENT/POLICE/FIRE/FORESTRY                              Q17-4
LAW/LAWYER                                                        Q17-5
ARTIST/MUSICIAN/DANCER/WRITER/JOURN/ETC                           Q17-6
BUSINESS/MANAGEMENT/ACCOUNTING/PROPRIET                           Q17-7
GEN.OFFICE/CLERICAL/BOOKKEEPER/TELLER                             Q17-8
SALES                                                             Q17-9
SKILLED LABOR/TRADES/MECH./BEAUT/BARBER                           Q17-10
SEMI-SKILL LABOR/MACH.OPERATOR/TRUCK DR                           Q17-11
UNSKILLED LABOR/MAID/JANITOR/ETC                                  Q17-12
RESTAURANT WORKER/WAITRESS/BUSBOY                                 Q17-13
HOUSEWIFE/OTHER OCCUPATION                                        Q17-14
NO CHOICE/NA TO Q.17                                              Q17-15
Q.16,17 COMPARISON OF OCCUPATIONAL CHOICES IN H.S. AND AT PRESENT Q17-16
HAD MADE CHOICE IN HIGH SCHOOL*
  *PRESENT CHOICE IS THE SAME                                     16,17-1
  *PRESENT CHOICE IS DIFFERENT                                    16,17-1-1
HAD NOT MADE CHOICE IN HIGH SCHOOL*                               16,17-1-2
  *HAVE SINCE MADE A CHOICE                                       16,17-2
  *HAVE NOT YET MADE A CHOICE                                     16,17-2-1
MADE DUAL CHOICES IN HIGH SCHOOL                                  16,17-2-2
Q.18 WHO HELPED YOU MOST IN PLANNING FOR THE FUTURE WHEN YOU WERE IN H.S.?  16,17-3
PARENTS & RELATIVES
ON-CAMPUS FRIENDS                                                 Q18-1
OFF-CAMPUS FRIENDS                                                Q18-2
SCHOOL COUNSELORS                                                 Q18-3
TEACHERS                                                          Q18-4
WORK EXPERIENCE ADVISORS                                          Q18-5
MYSELF                                                            Q18-6
NO ONE                                                            Q18-7
OTHER HELP                                                        Q18-8
MENTIONED MORE THAN ONE                                           Q18-9
                                                                  Q18-10
```

TABLE GENERATION PROGRAM:

TABLE TEXT, Page 7

```
PAGE 0008  09/04/74  04:40:13  ANEW       SPL LIST
NA TO Q.18                                                               Q18-11
Q.19 IF A MEMBER OF H.S. TEAMS, CLUBS, OR ORGANIZATIONS, WAS IT WORTH YOUR TIME?
WAS A MEMBER OF H.S. TEAM/CLUB/ORG                                       Q19-1-1
WAS NOT A MEMBER OF H.S. TEAM/CLUB/ORG                                   Q19-1-2
NA TO Q.19                                                               Q19-1-3
WAS A MEMBER OF STUDENT GOVERNMENT*                                      Q19-2-1
  *IT WAS WORTHWHILE                                                     Q19-2-1-1
  *IT WAS NOT WORTHWHILE                                                 Q19-2-1-2
WAS A MEMBER OF ATHLETIC TEAM*                                           Q19-3-1
  *IT WAS WORTHWHILE                                                     Q19-3-1-1
  *IT WAS NOT WORTHWHILE                                                 Q19-3-1-2
WAS A MEMBER OF SCHOLASTIC CLUB*                                         Q19-4-1
  *IT WAS WORTHWHILE                                                     Q19-4-1-1
  *IT WAS NOT WORTHWHILE                                                 Q19-4-1-2
Q.19(CTD) IF A MEMBER OF H.S. ORGANIZATIONS, WAS IT WORTH YOUR TIME?
WAS A MEMBER OF SCHOOL PUBLICATION*                                      Q19-5-1
  *IT WAS WORTHWHILE                                                     Q19-5-1-1
  *IT WAS NOT WORTHWHILE                                                 Q19-5-1-2
WAS A MEMBER OF VOCATIONAL CLUBS*                                        Q19-6-1
  *IT WAS WORTHWHILE                                                     Q19-6-1-1
  *IT WAS NOT WORTHWHILE                                                 Q19-6-1-2
WAS A MEMBER OF MUSIC/ACTING GROUPS*                                     Q19-7-1
  *IT WAS WORTHWHILE                                                     Q19-7-1-1
  *IT WAS NOT WORTHWHILE                                                 Q19-7-1-2
WAS A MEMBER OF CHEER LEADER/DRILL TM*                                   Q19-8-1
  *IT WAS WORTHWHILE                                                     Q19-8-1-1
  *IT WAS NOT WORTHWHILE                                                 Q19-8-1-2
WAS A MEMBER OF OTHER TEAM/CLUB/ORG.*                                    Q19-9-1
  *IT WAS WORTHWHILE                                                     Q19-9-1-1
  *IT WAS NOT WORTHWHILE                                                 Q19-9-1-2
Q.20-1 HOW HELPFUL WAS H.S. IN LEARNING SKILLS FOR READING FOR INSTR & PLEASURE?
NOT HELPFUL                                                              Q20-1-1
SOMEWHAT HELPFUL                                                         Q20-1-2
VERY HELPFUL                                                             Q20-1-3
NA TO Q.20-1                                                             Q20-1-4
Q.20-2 HOW HELPFUL WAS H.S. IN LEARNING SKILLS FOR WRITING REPORTS,LETTERS,NOTES
NOT HELPFUL                                                              Q20-2-1
SOMEWHAT HELPFUL                                                         Q20-2-2
VERY HELPFUL                                                             Q20-2-3
NA TO Q.20-2                                                             Q20-2-4
Q.20-3 HOW HELPFUL WAS H.S. IN LEARNING SKILLS FOR WORKING MATH&FINANCIAL PROBS.
NOT HELPFUL                                                              Q20-3-1
SOMEWHAT HELPFUL                                                         Q20-3-2
VERY HELPFUL                                                             Q20-3-3
NA TO Q.20-3                                                             Q20-3-4
Q.20-4 HOW HELPFUL WAS H.S. IN LEARNING SKILLS FOR PUBLIC SPEAKING?
NOT HELPFUL                                                              Q20-4-1
SOMEWHAT HELPFUL                                                         Q20-4-2
VERY HELPFUL                                                             Q20-4-3
NA TO Q.20-4                                                             Q20-4-4
Q.20-5 HOW HELPFUL WAS H.S. IN LEARNING SKILLS FOR PREPARING FOR MARRIAGE/FAMILY
NOT HELPFUL                                                              Q20-5-1
SOMEWHAT HELPFUL                                                         Q20-5-2
VERY HELPFUL                                                             Q20-5-3
NA TO Q.20-5                                                             Q20-5-4
Q.20-6 HOW HELPFUL WAS H.S. IN LEARNING SKILLS FOR GETTING & MAINTAINING A JOB?
NOT HELPFUL                                                              Q20-6-1
SOMEWHAT HELPFUL                                                         Q20-6-2
```

TABLE GENERATION PROGRAM:

TABLE TEXT, Page 8

```
VERY HELPFUL                                                                Q20-6-3
NA TO Q 20-6                                                                Q20-6-4
Q 20-7 HOW HELPFUL WAS H S  IN LEARNING SKILLS FOR USING PROPER SPOKEN ENGLISH?
NOT HELPFUL                                                                 Q20-7-1
SOMEWHAT HELPFUL                                                            Q20-7-2
VERY HELPFUL                                                                Q20-7-3
NA TO Q 20-7                                                                Q20-7-4
Q 20-8 HOW HELPFUL WAS H S  IN LEARNING SKILLS TO THINK OUT PROBS /ISSUES/OPIN ?
NOT HELPFUL                                                                 Q20-8-1
SOMEWHAT HELPFUL                                                            Q20-8-2
VERY HELPFUL                                                                Q20-8-3
NA TO Q 20-8                                                                Q20-8-4
Q 21-1 MY COUNSELOR GAVE ME GOOD INFORMATION IN PLANNING MY H S  PROGRAM
STRONGLY DISAGREE                                                           Q21-1-1
DISAGREE                                                                    Q21-1-2
NOT SURE/UNDECIDED                                                          Q21-1-3
AGREE                                                                       Q21-1-4
STRONGLY AGREE                                                              Q21-1-5
NA TO Q 21-1                                                                Q21-1-6
Q 21-2 MY COUNSELOR WAS HELPFUL IN PLANNING MY ACTIVITY AFTER GRADUATION
STRONGLY DISAGREE                                                           Q21-2-1
DISAGREE                                                                    Q21-2-2
NOT SURE/UNDECIDED                                                          Q21-2-3
AGREE                                                                       Q21-2-4
STRONGLY AGREE                                                              Q21-2-5
NA TO Q 21-2                                                                Q21-2-6
Q 21-3 MOST OF MY TEACHERS MADE THEIR COURSES INTERESTING AND ENJOYABLE
STRONGLY DISAGREE                                                           Q21-3-1
DISAGREE                                                                    Q21-3-2
NOT SURE/UNDECIDED                                                          Q21-3-3
AGREE                                                                       Q21-3-4
STRONGLY AGREE                                                              Q21-3-5
NA TO Q 21-3                                                                Q21-3-6
Q 21-4 MOST OF MY TEACHERS TRIED TO MEET MY SPECIFIC EDUCATIONAL NEEDS
STRONGLY DISAGREE                                                           Q21-4-1
DISAGREE                                                                    Q21-4-2
NOT SURE/UNDECIDED                                                          Q21-4-3
AGREE                                                                       Q21-4-4
STRONGLY AGREE                                                              Q21-4-5
NA TO Q 21-4                                                                Q21-4-6
Q 21-5 MOST OF MY TEACHERS RELATED THEIR SUBJECTS TO THE NEEDS OF TODAY
STRONGLY DISAGREE                                                           Q21-5-1
DISAGREE                                                                    Q21-5-2
NOT SURE/UNDECIDED                                                          Q21-5-3
AGREE                                                                       Q21-5-4
STRONGLY AGREE                                                              Q21-5-5
NA TO Q 21-5                                                                Q21-5-6
Q 21-6 MOST OF MY TEACHERS WERE NOT PREJUDICED TOWARD MINORITY GROUP STUDENTS
STRONGLY DISAGREE                                                           Q21-6-1
DISAGREE                                                                    Q21-6-2
NOT SURE/UNDECIDED                                                          Q21-6-3
AGREE                                                                       Q21-6-4
STRONGLY AGREE                                                              Q21-6-5
NA TO Q 21-6                                                                Q21-6-6
Q 21-7 I FEEL THAT HIGH SCHOOL WAS A PLEASANT AND REWARDING EXPERIENCE
STRONGLY DISAGREE                                                           Q21-7-1
DISAGREE                                                                    Q21-7-2
NOT SURE/UNDECIDED                                                          Q21-7-3
```

TABLE GENERATION PROGRAM:

TABLE TEXT, Page 9

```
AGREE                                                          021-7-4
STRONGLY AGREE                                                 021-7-5
NA TO Q 21-7                                                   021-7-6
```

TABLE GENERATION PROGRAM

TABLE TEXT, Page 10 (end)

5. Vocational Coordinator Listing Program

and

Test Data

```
PAGE   1

// JOB
  0000        0004        0004        0000

V2 M11   ACTUAL  8K  CONFIG  8K

// FOR
**PRINTS PRELIMINARY LISTING FOR VOCATIONAL COORDINATOR
*LIST SOURCE PROGRAM
*ONE WORD INTEGERS
*IOCS(2501 READER,1403 PRINTER)
```

VOCATIONAL COORDINATOR LISTING PROGRAM:

Page 1

```
PAGE   2              PRINTS PRELIMINARY LISTING FOR VOCATIONAL COORDINATOR

      DIMENSION IVOC(5),ITIT(21),NCOM(4),LEAV(4),ISTAT(6,10),JS(60),
     1IJT(19),ISM(10),IREL(5,4),JR(20),ISCH(3),IGRAD(3),NAME(25)
      EQUIVALENCE (ISTAT(1,1),JS(1)),(IREL(1,1),JR(1))
      DATA JS/'AR','ME','D ','FO','RC','ES','SC','HO','OL','.F','.T','.
     1','SC','HO','OL','.P','.T','. ',6*16448,'WO','RK','IN','G.','F.','
     2T.',12*16448,'WO','RK','IN','G.','P.','T.','UN','EM','PL','OY','ED
     3','  ','UN','KN','OW','N ','  ','  '/
      DATA JR/'SP','EC','IF','IC','  ','RE','LA','TE','D ','  ','UN','RE
     1','LA','TE','D ',5*16448/
C
C--TO OPERATE, LOAD VOCATIONAL PROGRAM I.D. CARDS FOLLOWED BY ONE BLANK
C--CARD. THEN LOAD CARDS FOR VOCATIONAL GRADUATES FOLLOWED BY ONE BLANK.
C--(TWO CARDS PER GRADUATE. SECOND CARD SHOULD CONTAIN STUDENTS NAME
C-- IN COLUMNS 14-38)
C
      DO 5 I=25,30
      JS(I+6)=JS(I)
5     JS(I+12)=JS(I)
C--PART 1 - LISTS VOCATIONAL PROGRAM I.D.'S
      WRITE(5,999)
999   FORMAT('1'//36X,'VOCATIONAL PROGRAM IDENTIFICATION'///76X,'-NO.COM
     1PLETING- --LEFT EARLY---'/12X,'DISTRICT  VOCATIONAL',44X,'----PROG
     2RAM---- --WITH SKILLS--'/14X,'CODE   PROGRAM CODE VOCATIONAL PROGR
     3AM TITLE',19X,'MALES  FEMALES  MALES  FEMALES'/12X,8('-'),1X,12('-
     4'),1X,41('-'),4(' -------')/)
1     READ(8,998)IDC,IVOC,ITIT,NCOM,LEAV
998   FORMAT(A2,1X,5A2,1X,20A2,A1,4(1X,2A2))
      IF(IDC-16448)2,10,2
2     WRITE(5,997)IDC,IVOC,ITIT,NCOM,LEAV
997   FORMAT(15X,A2,5X,5A2,2X,20A2,A1,2X,2A2,3(4X,2A2))
      GO TO 1
C--PART 2 - LISTS VOCATIONAL GRADUATES WITH MORE THAN ONE VOC.PROG. OR
C--          WHO ARE WORKING FULL-TIME.
10    WRITE(5,996)
996   FORMAT('1'//20X,'VOCATIONAL GRADS WHO ARE WORKING FULL-TIME OR TOO
     1K MORE THAN 1 VOC.PROG.'///' SCHOOL GRADUATE',7X,'DISTRICT VOCATIO
     2NAL   GRADUATE   VOC.PROG./JOB    JOB TITLE (IF WORKING)
     3  YOUR JUDGEMENT')
      WRITE(5,995)
995   FORMAT(' NUMBER NAME/NO.  SEX',5X,'PROGRAM CODES',7X,'STATUS',5X,'
     1RELATEDNESS',5X,'MAJOR (IF IN SCHOOL FULL-TIME)    OF RELATEDNESS'
     2/' ------ ',8('-'),' -----',1X,19('-'),1X,12('-'),1X,13('-'),1X,36
     3('-'),1X,14('-')/)
11    READ(8,994)ISCH,IGRAD,ISEX,IVOC,JVOC,IST,IJT,ISM
994   FORMAT(6A1,2X,A1,6A2,I1,29A2)
      IF(ISCH(3)-16448)12,100,12
12    READ(8,981)NAME
981   FORMAT(13X,25A1)
      IF(IST)13,13,15
13    IST=10
15    IF(JVOC-16448)20,16,20
16    IF((5-IST)*(IST-7))26,27,27
20    IF(IVOC(1)-16448)25,17,25
17    IVOC(1)=JVOC
```

VOCATIONAL COORDINATOR LISTING PROGRAM:

Page 2

```
25      IF((5-IST)*(IST-7))11,27,27
26      JST=4
        GO TO 30
27      JST=IST-4
30      WRITE(5,982)NAME
982     FORMAT(8X,25A1)
        WRITE(5,993)ISCH,IGRAD,ISEX,IVOC,(ISTAT(J,IST),J=1,6),(IREL(K,JST)
       1,K=1,5)
993     FORMAT(3X,3A1,5X,3A1,5X,A1,5X,5(2X,A2),3X,6A2,3X,5A2)
        IF((5-IST)*(IST-8))36,35,35
35      WRITE(5,992)IJT
992     FORMAT('+',69X,19A2)
        GO TO 11
36      WRITE(5,992)ISM
        GO TO 11
100     CALL EXIT
        END

FEATURES SUPPORTED
 ONE WORD INTEGERS
 IOCS

CORE REQUIREMENTS FOR
 COMMON       0  VARIABLES     186  PROGRAM     766

END OF COMPILATION

// XEQ
```

VOCATIONAL COORDINATOR LISTING PROGRAM:

Page 3 (end)

```
                                                                       H.S. NAME
    0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8  } CARD
    5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0  } COLUMNS
01 07/0303/00 NURSING ASSISTANCE (AIDE)                   40   80    2   10
02 17/0399/00 AUTOMOTIVE SERVICES                        100   30   15    4
03 17/0999/00 COMMERCIAL PHOTOGRAPHY OCCUPATIONS         500  300   24   16
04 17/1300/00 DRAFTING                                   300  200    6    1
05 17/9900/00 TRADE AND INDUSTRIAL OCCUPATIONS           100  100    7   11
                                            BLANK CARD
0110011 10102030405  5AUTO MECHANIC
0110012      HARVEY WALLBANGER
0110021 20504        7WAITRESS
0110022      JULIET JONES
0110031 1          029
0110032      JOHN J JONES
0110041 1030205      2                                      ASTROPHYSICS
0110042      ALBERT EINSTEIN
0110051 20301        8DENTAL ASSISTANT TRAINEE
0110052      CINDERELLA
0110061 1          036PROOF SALESMAN
0110062      DUDLY DOGOOD
                                                           BLANK CARD
```

VOCATIONAL COORDINATOR LISTING PROGRAM:

EXAMPLE DATA, Page 1 (end)

6. VE-45 Report Generation Program

and

Test Data

201

```
PAGE   1

// JOB
  0000         0004         0004         0000

V2 M11   ACTUAL  8K  CONFIG  8K

// FOR
**PRINTS VE-45 REPORT
*LIST SOURCE PROGRAM
*ONE WORD INTEGERS
*IOCS(DISK,1403 PRINTER,2501 READER)
```

VE-45 REPORT GENERATION PROGRAM:

Page 1

```
      DEFINE FILE 1(100,30,U,KV)
      DIMENSION ISCH(40),MX(100,2,10),ICODE(100),KVOC(5),LVOC(2))
      DIMENSION IFIN(2),ILEA(2),IOUT(2,12),OUT(12)
      DATA MX/2000*0/
C
C  DATA FORMAT
C      1. CARD WITH UP TO 80 CHARACTERS OF DISTRICT INFORMATION
C      2. CALIF. VOC.PROG. IDENTIFICATION CARDS FOLLOWED BY A BLANK CARD
C      3. DECK OF VOCATIONAL GRADUATE CARDS FOLLOWED BY ONE BLANK CARD
C
      NV=0
C  READS CARD WITH DISTRICT NAME, ADDRESS, ETC.
      READ(8,999)ISCH
999   FORMAT(40A2)
C  LOADS VOCATIONAL PROGRAM I.D.
10    READ(8,998) IDC,KVOC,LVOC,IFIN,ILEA
998   FORMAT(I2,1X,5A2,1X,20A2,A1,4I5)
      IF(IDC)20,20,11
11    NV=NV+1
      ICODE(NV)=IDC
      WRITE(1'NV)KVOC,LVOC,IFIN,ILEA
      GO TO 10
C  UPDATES VE-45 MATRIX FROM VOC GRADUATE CARDS
20    READ(8,997)IGRAD,ISEX,IVOC,ISTAT
997   FORMAT(3X,I3,2X,I1,10X,I2,I1)
      IF(IGRAD)30,30,21
21    DO 25 I=1,NV
      IF(ICODE(I)-IVOC)25,22,25
22    IF(ISTAT)23,23,24
23    ISTAT=10
24    MX(I,ISEX,ISTAT)=MX(I,ISEX,ISTAT)+1
      GO TO 20
25    CONTINUE
      GO TO 20
C  CALCULATES AND PRINTS VE-45 TABLE
30    NP=0
      IL=15
      DO 70 IV=1,NV
      IL=IL+1
      IF(IL-15) 45,40,40
40    NP=NP+1
      WRITE(5,996)ISCH,NP
996   FORMAT('1',24('*')/' *',22X,'*      DISTRICT - ',40A2/' * VOCATIONA
     1L EDUCATION *'/' * VE-45 REPORT',9X,'*      PERSON PREPARING REPORT
     2 -'/' *',22X,'*'/' ',24('*'),5X,'PHONE -',19X,'DATE PREPARED -',40
     3X,'PAGE -',I2//)
      WRITE(5,995)
995   FORMAT(45X,'TOTAL',9X,'---NOT AVAILABLE---- TOTAL  ---NUMBER IN LA
     1BOR FORCE--- UNEMPL. LEFT'/43X,'S COMP-  STATUS ENTERED FULL  OTHE
     2R  EMPLD. --EMPLD. FULL-TIME-- EMPLD. (SEEK- PROGRAM'/43X, 'E LETI
     3NG  UN-   ARMED   TIME  REAS-  AND/OR TRAIN- RELAT- UNRE-   PART-
     4  ING  PRIOR TO')
      WRITE(5,994)
```

VE-45 REPORT GENERATION PROGRAM

Page 2

```
994   FORMAT(' CALIFORNIA INSTRUCTIONAL CODES AND TITLES X PROGRM KNOWN
     1 FORCES SCHOOL  ONS    AVAIL. ED FOR   ED   LATED   TIME   WORK) CO
     2MPLTN.'/' ',41('-'),' -',11(' ------'),1X,8('-'))
      IL=1
45    READ(1'IV)KVOC,LVOC,IFIN,ILEA
      DO 60 IS=1,2
      IOUT(IS,1)=IFIN(IS)
      IOUT(IS,12)=ILEA(IS)
      IOUT(IS,2)=MX(IV,IS,10)
      IOUT(IS,3)=MX(IV,IS,1)
      IOUT(IS,4)=MX(IV,IS,2)
      IOUT(IS,5)=MX(IV,IS,3)
      IOUT(IS,6)=0
      IOUT(IS,7)=MX(IV,IS,5)
      IOUT(IS,8)=MX(IV,IS,6)
      IOUT(IS,9)=MX(IV,IS,7)
      IOUT(IS,10)=MX(IV,IS,8)
      IOUT(IS,11)=MX(IV,IS,9)
      SUM=0.
      DO 50 I=2,11
50    SUM=SUM+IOUT(IS,I)
      ISUM=0
      P=(IOUT(IS,1)*1.)/SUM
      DO 51 I=2,11
      T=IOUT(IS,I)*P
      IOUT(IS,I)=T
      OUT(I)=T-IOUT(IS,I)
51    ISUM=ISUM+IOUT(IS,I)
      IDIFF=IOUT(IS,1)-ISUM
52    IF(IDIFF)60,60,55
55    X=-999.
      DO 57 I=2,11
      IF(OUT(I)-X)57,57,56
56    X=OUT(I)
      IP=I
57    CONTINUE
      IOUT(IS,IP)=IOUT(IS,IP)+1
      OUT(IP)=-9999.
      IDIFF=IDIFF-1
      GO TO 52
60    IOUT(IS,6)=IOUT(IS,7)+IOUT(IS,8)+IOUT(IS,9)+IOUT(IS,10)+IOUT(IS,11
     1)
      WRITE(5,993)KVOC,(IOUT(1,J),J=1,12),LVOC,(IOUT(2,K),K=1,12)
993   FORMAT('0TITLE',18X,'CODE - ',5A2,'  M',I5,11I7/' ',20A2,A1,' F',I
     15,11I7)
70    CONTINUE
      CALL EXIT
      END

FEATURES SUPPORTED
 ONE WORD INTEGERS
 IOCS

CORE REQUIREMENTS FOR
 COMMON      0  VARIABLES   2268  PROGRAM   1128

END OF COMPILATION

// XEQ
```

VE-45 REPORT GENERATION PROGRAM:

Page 3 (end)

```
    0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8 } CARD
    5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0 } COLUMNS
SOME CALIFORNIA HIGH SCHOOL - CLASS OF 1492
01 07/0303/00 NURSING ASSISTANCE (AIDE)                   40   30    2   10
02 17/0399/00 AUTOMOTIVE SERVICES                        100   50   15    4
03 17/0999/00 COMMERCIAL PHOTOGRAPHY OCCUPATIONS         500  300   24   18
04 17/1300/00 DRAFTING                                   300  200    6    1
05 17/9900/00 TRADE AND INDUSTRIAL OCCUPATIONS          100  100    7   11
                                            BLANK CARD
   199  1           12
   173  1           12
   100  1           13
   125  1           13
   214  1           13
   016  1           14
   065  1           15
   161  1           15
   202  1           15
   001  1           16
   118  1           16
   127  1           16
   023  1           17
   092  1           17
   153  1           17
   105  1           18
   143  1           18
   048  1           1
   094  2           11
   110  2           11
   082  2           12
   166  2           12
   058  2           13
   132  2           13
   027  2           14
   034  2           14
   051  2           14
   071  2           14
   009  2           15
   037  2           16
   190  2           18
   194  2           18
   209  2           18
   137  2           19
   186  2           19
   093  2           1
   180  2           1
   055  1           21
   142  1           21
   080  1           22
   095  1           22
   116  1           22
   130  1           22
```

VE-45 REPORT GENERATION PROGRAM:

EXAMPLE DATA, Page 1

```
    0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8 } CARD
    5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0 } COLUMNS
   003  1           23
   042  1           23
   200  1           23
   071  1           24
   107  1           24
   136  1           24
   063  1           25
   087  1           25
   060  1           26
   146  1           26
   150  1           26
   183  1           26
   173  1           27
   011  1           28
   208  1           29
   015  1           2
   111  1           2
   193  1           2
   032  2           21
   067  2           21
   133  2           21
   162  2           21
   179  2           22
   215  2           22
   050  2           23
   1[illegible]6  2           23
   126  2           24
   188  2           24
   213  2           24
   148  2           25
   030  2           27
   036  2           27
   083  2           27
   104  2           27
   136  2           27
   204  2           27
   172  2           28
   024  2           29
   040  2           29
   122  2           29
   167  2           29
   007  2           2
   072  2           2
   101  1           31
   0[illegible]8  1           32
   144  1           32
   155  1           32
   187  1           32
   075  1           34
   095  1           35
```

150

VE-45 REPORT GENERATION PROGRAM:

EXAMPLE DATA, Page 2

```
    0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8 } CARD
    5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0 } COLUMNS
  099   1           35
  170   1           36
  119   1           37
  196   1           37
  062   1           38
  084   1           38
  205   1           38
  005   1           39
  033   1           39
  076   1           39
  028   1           3
  091   1           3
  189   1           3
  012   2           31
  019   2           31
  047   2           31
  149   2           31
  198   2           31
  103   2           33
  160   2           34
  044   2           35
  059   2           35
  038   2           36
  074   2           36
  108   2           36
  053   2           37
  164   2           37
  210   2           37
  017   2           38
  077   2           38
  139   2           38
  088   2           39
  049   2           3
  068   2           3
  114   2           3
  124   2           3
  131   2           3
  152   2           3
  176   2           3
  102   1           42
  [illegible]   1           42
  07[illegible]   1           43
  163   1           43
  168   1           43
  086   1           44
  115   1           44
  171   1           44
  106   1           45
  197   1           45
  212   1           45
```

VE-45 REPORT GENERATION PROGRAM:

EXAMPLE DATA, Page 3

```
    0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8 } CARD
    5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0 } COLUMNS
  079    1          47
  184    1          47
  191    1          47
  090    1          48
  121    1          48
  014    1          4
  158    1          4
  006    2          41
  020    2          43
  025    2          43
  035    2          43
  070    2          43
  141    2          43
  145    2          44
  029    2          45
  052    2          45
  046    2          46
  203    2          46
  004    2          47
  128    2          47
  113    2          48
  056    2          49
  096    2          49
  151    2          49
  177    2          49
  064    2          4
  098    2          4
  207    2          4
  041    1          51
  085    1          51
  123    1          51
  054    1          52
  069    1          52
  112    1          53
  043    1          54
  061    1          54
  039    1          55
  129    1          55
  135    1          55
  174    1          56
  031    1          56
  211    1          56
  159    1          57
  045    1          57
  057    1          57
  147    1          57
  022    1          58
  073    1          58
  140    1          58
  185    1          58
```

VE-45 REPORT GENERATION PROGRAM:

EXAMPLE DATA, Page 4

```
    0    1    1    2    2    3    3    4    4    5    5    6    6    7    7    8 } CARD
    5    0    5    0    5    0    5    0    5    0    5    0    5    0    5    0 } COLUMNS
   013  1           59
   101  1           59
   206  1           59
   026  1           5
   066  1           5
   178  1           5
   109  2           52
   195  2           52
   089  2           53
   120  2           53
   002  2           54
   201  2           54
   117  2           55
   154  2           55
   169  2           55
   182  2           55
   018  2           56
   192  2           56
   010  2           57
   097  2           58
   157  2           58
   165  2           58
   081  2           5
```

VE-45 REPORT GENERATION PROGRAM:

EXAMPLE DATA, Page 5 (end)

C. Example Displays

```
SOME CALIFORNIA HIGH SCHOOL

    2    5    6    8    9   10   12   15   17   19   20   21   22   23   24   25   26   27   28   30
   31   32   33   38   41   42   46   48   49   53   54   59   60   63   64   67   68   70   72   73
   75   78   79   81   86   68   89   90   91   94   95   98  101  103  105  107  108  109  111  114
  115  117  122  123  125  127  128  132  133  134  135  136  138  140  141  144  145  148  149  152
  154  155  160  161  163  165  168  170  172  173  177  180  181  182  184  185  186  189  191  192
  193  196  198  202  203  205  208  210  211  212  213  214  215  216  220  221  223  224  225  228
  229  231
```

Display 1

Listing of Sample Member Identification Numbers
(Output of Sample Selection Program)

```
SOME CALIFORNIA HIGH SCHOOL                                                        SAMPLE LIST
---------------------------------------------------------------------------------    PAGE 1

     GRADUATE            ETHNIC  H.S.
      NUMBER     SEX     ORIGIN PROGRAM   G.P.A. VOCATIONAL PROGRAMS
     -------- -------- ------- -------  ------- -----------------------------------------
          2        2        2       3        3   14000000
          5        1        2       2        1
          6        1        2       1        2
          8        2        2       3        2   14000000
          9        2        2       3        2   14000000
         10        1        2       3        2   04000000
         12        2        2       3        3   14000000
         15        1        2       2        1
         17        1        2       1        3
         19        2        2       2        3
         20        1        2       3        2   04000000 17000000
         21        1        2       3        2   14000000
         22        2        2       1        3
         23        1        2       2        2
         24        2        2       3        3   14000000
         25        1        2       3        2   14000000
         26        2        2       3        2   14000000
         27        2        1       3        3   14000000
         28        2        2       2        1
         30        1        2       2        2
         31        2        2       3        2   14000000
         32        2        2       3        2   14000000
         33        1        2       2        2
         38        2        2       3        2   14000000
         41        2        2       3        2   14000000
         42        1        2       2        2
         46        1        2       2        2
         48        1        2       3        1   04000000
         49        2        2       3        3   14000000
         53        2        2       3        2   14000000
         54        1        2       2        1
         59        2        2       1        3
         60        2        2       3        3   14000000
         63        1        4       2        2
         64        2        2       3        3   14000000
         67        1        2       2        2
         68        2        2       1        2
         70        2        2       3        3   14000000
         72        2        1       2        2
         73        2        2       3        3   14000000
         75        1        2       2        2
         78        1        2       1        3
         79        2        2       1        3
         81        1        2       1        3
         86        1        1       2        2
         88        2        2       3        2   14000000
         89        1        3       2
         90        1        2       2        2
         91        2        2       3        3   14000000
         94        1        2       1        2
```

Display 2(a)
Listing of Sample Member Data to be Used in Coding Questionnaires
(Output of Sample Selection Program)

```
SOME CALIFORNIA HIGH SCHOOL                                                          SAMPLE LIST
-------------------------------------------------------------------------------       PAGE 2

     GRADUATE          ETHNIC  H.S.
      NUMBER    SEX    ORIGIN PROGRAM  G.P.A. VOCATIONAL PROGRAMS
     -------- ------- ------- -------  ------- ----------------------------------------
         95      2       2       3        2    14000000
         98      2       2       3        2    14000000
        101      2       2       3        2    14000000
        103      2       2       3        2    14000000
        105      1       2       3        2    14000000
        107      1       2       2        3
        108      2       2       1        3
        109      1       2       2        2
        111      2       2       1        3
        114      1       2       2        1
        115      2       2       2        1
        117      2       2       3        2    04000000 14010200
        122      1       2       2        2
        123      2       2       3        2    14000000
        125      2       3       2        2
        127      1       2       3        2    04000000
        128      2       2       3        2    14000000
        132      1       2       2        3
        133      1       2       2        1
        134      1       2       1        2
        135      1       2       1        3
        136      2       2       2        3
        138      2       2       3        2    14000000
        140      2       2       3        1    14000000
        141      2       2       3        2    14000000
        144      2       3       3        2    14000000
        145      2       2       3        2    14000000
        148      1       2       3        1    17000000
        149      1       2       2        2
        152      1       2       2        2
        154      2       2       3        3    14000000
        155      2       2       3        2    14000000
        160      1       2       2        2
        161      1       2       2        1
        163      1       2       2        2
        165      2       2       2        2
        168      2       2       3        2    14000000
        170      2       2       2        3
        172      1       2       3        1    04000000
        173      1       2       2        3
        177      1       2       2        1
        180      1       2       2        3
        181      1       2       2        1
        182      2       2       2        2
        184      2       3       1        3
        185      1       2       3        1    17000000
        186      2       2       2        2
        189      2       1       3        2    14000000
        191      2       2       3        2    14000000
        192      1       2       1        3
```

Display 2(b)
Listing of Sample Member Data to be Used in Coding Questionnaires
(Output of Sample Selection Program)

```
SOME CALIFORNIA HIGH SCHOOL                                                                  SAMPLE LIST
------------------------------------------------------------------------------------          PAGE 3

    GRADUATE          ETHNIC  H.S.
     NUMBER    SEX    ORIGIN PROGRAM  G.P.A. VOCATIONAL PROGRAMS
    -------- ------- ------- ------- ------- ------------------------------------------------
      193       1       2       2       2
      196       1       2       2       2
      198       2       2       3       2    14000000
      202       2       2       2       2
      203       1       2       2       3
      205       1       2       2       2
      208       1       2       2       1
      210       1       3       1       3
      211       1       2       2       2
      212       1       3       3       2    14000000
      213       2       2       2       2
      214       2       2       3       1    04000000
      215       1       1       3       2    14000000
      216       1       2       1       2
      220       2       2       3       2    14000000
      221       2       2       3       3    14000000
      223       2       2       1       3
      224       1       2       3       3    14000000
      225       1       2       2       2
      228       1       1       2       1
      229       2       3       3       2    14000000
      231       1       1       3       1    19000000
```

Display 2(c)
Listing of Sample Member Data to be Used in Coding Questionnaires
(Output of Sample Selection Program)

```
SOME CALIFORNIA HIGH SCHOOL

TABLE - 1
SEX X GPA X ETHNIC                       GRADUATING
                                            CLASS              SAMPLE
                                          N     PCT.          N     PCT.
                                         ---   -----         ---   -----
                                         231   100.0         122   100.0
                      S1  G1  E1           2     0.9           2     1.6
                      S1  G1  E2          21     9.1          13    10.7
                      S1  G1  E3           0     0.0           0     0.0
                      S1  G1  E4           0     0.0           0     0.0
                      S1  G1  E5           0     0.0           0     0.0
                      S1  G2  E1           2     0.9           2     1.6
                      S1  G2  E2          58    25.1          29    23.8
                      S1  G2  E3           0     0.0           0     0.0
                      S1  G2  E4           1     0.4           1     0.8
                      S1  G2  E5           1     0.4           1     0.8
                      S1  G3  E1           0     0.0           0     0.0
                      S1  G3  E2          23    10.0          11     9.0
                      S1  G3  E3           0     0.0           0     0.0
                      S1  G3  E4           2     0.9           2     1.6
                      S1  G3  E5           0     0.0           0     0.0
                      S2  G1  E1           0     0.0           0     0.0
                      S2  G1  E2           7     3.0           4     3.3
                      S2  G1  E3           0     0.0           0     0.0
                      S2  G1  E4           0     0.0           0     0.0
                      S2  G1  E5           0     0.0           0     0.0
                      S2  G2  E1           2     0.9           2     1.6
                      S2  G2  E2          61    26.4          30    24.6
                      S2  G2  E3           0     0.0           0     0.0
                      S2  G2  E4           4     1.7           3     2.5
                      S2  G2  E5           0     0.0           0     0.0
                      S2  G3  E1           2     0.9           1     0.8
                      S2  G3  E2          44    19.0          20    16.4
                      S2  G3  E3           0     0.0           0     0.0
                      S2  G3  E4           1     0.4           1     0.8
                      S2  G3  E5           0     0.0           0     0.0
```

Display 3(a)
Listing of Graduating Class and Sample Comparisons
Sex X GPA X Ethnic Grouping
(Output of Sample Selection Program)

```
SOME CALIFORNIA HIGH SCHOOL

TABLE - 2
VOCATIONAL PROGRAM
                        ---------TOTAL---------     ---------MALE----------     ---------FEMALE--------
                        GRADUATING                  GRADUATING                  GRADUATING
                          CLASS       SAMPLE          CLASS       SAMPLE          CLASS       SAMPLE
                         N    PCT.    N    PCT.      N    PCT.    N    PCT.      N    PCT.    N    PCT.
                        ---  -----  ---  -----      ---  -----  ---  -----      ---  -----  ---  -----
                        231  100.0  122  100.0      110  100.0   61  100.0      121  100.0   61  100.0
               04000000  12    5.2    7    5.7        8    7.3    5    8.2        4    3.3    2    3.3
               14000000  85   36.8   45   36.9       11   10.0    6    9.8       74   61.2   39   63.9
               14010200   1    0.4    1    0.8        0    0.0    0    0.0        1    0.8    1    1.6
               17000000   5    2.2    3    2.5        5    4.5    3    4.9        0    0.0    0    0.0
               19000000   1    0.4    1    0.8        1    0.9    1    1.6        0    0.0    0    0.0
```

Display 3(b)
Listing of Graduating Class and Sample Comparisons
Vocational Programs
(Output of Sample Selection Program)

```
SOME CALIFORNIA HIGH SCHOOL

TABLE - 3
HIGH SCHOOL PROGRAM
                                  GRADUATING
                                    CLASS               SAMPLE
                                   N    PCT.           N    PCT.
                                  ---  -----         ---  -----
                                  231  100.0         122  100.0
                   1               47   20.3          25   20.5
                   2              102   44.2          49   40.2
                   3              102   44.2          55   45.1

TABLE - 4
YEARS AT SCHOOL
                                  GRADUATING
                                    CLASS               SAMPLE
                                   N    PCT.           N    PCT.
                                  ---  -----         ---  -----
                                  231  100.0         122  100.0
                   0                0    0.0           0    0.0
                   1               20    8.7          11    9.0
                   2               39   16.9          21   17.2
                   3               91   39.4          48   39.3
                   4               81   35.1          42   34.4
```

Display 3(c)
Listing of Graduating Class and Sample Comparisons
High School Program - Years at School
(Output of Sample Selection Program)

PAGES 174 THROUGH 176 CONTAINING STUDENTS NAMES, ADDRESSES, AND TELEPHONE NUMBERS WERE NOT REPRODUCIBLE AND WERE REMOVED FROM THIS DOCUMENT PRIOR TO ITS BEING SUBMITTED TO THE ERIC DOCUMENT REPRODUCTION SERVICE.

```
CAL HIGH 1974 CLASS  TABLE NO.     1     Q.1 WHAT ARE YOU DOING AT THE PRESENT TIME?
                                         BASE = TOTAL

                                               ----SEX---- --ETHNIC BACKGROUND---- --H.S. PROGRAM--- ------G.P.A.-----
                                                     FE-               SPAN.        COLL.       VOC.
                                         TOTAL MALE  MALE  BLACK CAUC. NAME  OTHER PREP. GEN'L PREP. 0-1.9 2-2.9 3-4.0
                                         ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----

                    TOTAL                   42    22    20    12    12    12     6    18    12    12    14    14    14
                    PERCENT              100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.

          IN SCHOOL FULL TIME               16     8     8     8     2     6     0     8     8     0     6     4     6
                                           38.   36.   40.   67.   17.   50.    0.   44.   67.    0.   43.   29.   43.

          IN SCHOOL PART TIME               12     6     6     4     2     6     0     0     4     8     4     4     4
                                           29.   27.   30.   33.   17.   50.    0.    0.   33.   67.   29.   29.   29.

          WORKING FULL TIME                 14    10     4     4     6     2     2     4     4     6     4     4     6
                                           33.   45.   20.   33.   50.   17.   33.   22.   33.   50.   29.   29.   43.

          WORKING PART TIME                  8     4     4     4     0     4     0     4     4     0     2     4     2
                                           19.   18.   20.   33.    0.   33.    0.   22.   33.    0.   14.   29.   14.

          ARMED FORCES                       2     2     0     0     2     0     0     2     0     0     0     2     0
                                            5.    9.    0.    0.   17.    0.    0.   11.    0.    0.    0.   14.    0.

          HOUSEWIFE                          4     0     4     0     0     0     4     4     0     0     2     2     0
                                           10.    0.   20.    0.    0.    0.   67.   22.    0.    0.   14.   14.    0.

          NOT WORKING, LOOKING FOR JOB       4     2     2     0     2     2     0     0     0     4     2     0     2
                                           10.    9.   10.    0.   17.   17.    0.    0.    0.   33.   14.    0.   14.

          NOT WORKING, NOT LOOKING FOR JOB   0     0     0     0     0     0     0     0     0     0     0     0     0
                                            0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

          OTHER                              0     0     0     0     0     0     0     0     0     0     0     0     0
                                            0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

          IN SCHOOL FULL TIME + WORKING FT/PT  8     4     4     4     0     4     0     4     4     0     2     4     2
                                           19.   18.   20.   33.    0.   33.    0.   22.   33.    0.   14.   29.   14.

          IN SCHOOL PART TIME + WORKING FT/PT  6     4     2     4     0     2     0     0     4     2     2     2     2
                                           14.   18.   10.   33.    0.   17.    0.    0.   33.   17.   14.   14.   14.

          NA TO Q.1                          0     0     0     0     0     0     0     0     0     0     0     0     0
                                            0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.
```

Display 6(a)
Listing of Total Respondent Data from Questionnaire*
(Output of Table Generation Program)

* Percentages may be applied to entire class

```
 CAL HIGH 1974 CLASS  TABLE NO.    2     Q.2 WHAT TYPE OF SCHOOL ARE YOU ATTENDING?
                                        BASE = IN SCHOOL TOTAL

                                              ----SEX---- --ETHNIC BACKGROUND---- --H.S. PROGRAM--- ------G.P.A.-----
                                                     FE-                SPAN.       COLL.       VOC.
                                        TOTAL MALE  MALE  BLACK CAUC. NAME  OTHER PREP. GEN'L PREP. 0-1.9 2-2.9 3-4.0
                                        ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----

               TOTAL                       28    14    14    12     4    12     0     8    12     8    10     8    10
               PERCENT                   100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.

4-YEAR COLLEGE/UNIVERSITY                  10     4     6     4     2     4     0     6     4     0     4     4     2
                                          36.   29.   43.   33.   50.   33.    0.   75.   33.    0.   40.   50.   20.

TECHNICAL SCHOOL                            4     4     0     2     2     0     0     0     2     2     2     0     2
                                          14    29.    0.   17.   50.    0.    0.    0.   17.   25.   20.    0.   20.

TRADE SCHOOL                                0     0     0     0     0     0     0     0     0     0     0     0     0
                                           0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

PRIVATE BUSINESS SCHOOL                     2     0     2     0     0     2     0     0     0     2     0     0     2
                                           7.    0.   14.    0.    0.   17.    0.    0.    0.   25.    0.    0.   20.

OTHER                                       0     0     0     0     0     0     0     0     0     0     0     0     0
                                           0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

COMMUNITY COLLEGE*                         12     6     6     6     0     6     0     2     6     4     4     4     4
                                          43.   43.   43.   50.    0.   50.    0.   25.   50.   50.   40.   50.   40.

  *PLAN TRANSFER TO 4-YEAR SCHOOL           6     4     2     4     0     2     0     2     2     2     2     2     2
                                          50.   67.   33.   67.    0.   33.    0.  100.   33.   50.   50.   50.   50.

  *TWO-YEAR AA PROGRAM ONLY                 4     2     2     2     0     2     0     0     4     0     0     2     2
                                          33.   33.   33.   33.    0.   33.    0.    0.   67.    0.    0.   50.   50.

  *CERTIFICATE PROGRAM                      2     0     2     0     0     2     0     0     0     2     2     0     0
                                          17.    0.   33.    0.    0.   33.    0.    0.    0.   50.   50.    0.    0.

  *OTHER/NA PROGRAM                         0     0     0     0     0     0     0     0     0     0     0     0     0
                                           0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

NA TO Q.2 (IF ATTENDING SCHOOL)             0     0     0     0     0     0     0     0     0     0     0     0     0
                                           0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.
```

Display 6(b)

Listing of Total Respondent Data from Questionnaire*
(Output of Table Generation Program)

*Percentages may be applied to entire class

```
CAL HIGH 1974 CLASS  TABLE NO.     3    Q. 3 WHAT IS THE NAME OF THE SCHOOL?
                                        BASE = IN SCHOOL TOTAL

                                              ----SEX---- --ETHNIC BACKGROUND---- --H. S.  PROGRAM--- ------G. P. A. -----
                                                    FE-               SPAN.       COLL.        VOC.
                                        TOTAL  MALE  MALE BLACK CAUC.  NAME OTHER PREP. GEN'L PREP. 0-1.9 2-2.9 3-4.0
                                        ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----

               TOTAL                       28    14    14    12     4    12     0     8    12     8    10     8    10
               PERCENT                   100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.

ANY UNIVERSITY OF CALIFORNIA                6     4     2     4     0     2     0     4     2     0     4     2     0
                                          21.   29.   14.   33.    0.   17.    0.   50.   17.    0.   40.   25.    0.

ANY CALIFORNIA STATE UNIVERSITY             6     4     2     2     4     0     0     2     2     2     2     0     4
                                          21.   29.   14.   17.  100.    0.    0.   25.   17.   25.   20.    0.   40.

ANY OTHER CALIFORNIA STATE COLLEGE          0     0     0     0     0     0     0     0     0     0     0     0     0
                                           0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

ANY CALIFORNIA COMMUNITY COLLEGE            8     6     2     6     0     2     0     2     6     0     2     2     4
                                          29.   43.   14.   50.    0.   17.    0.   25.   50.    0.   20.   25.   40.

ANY CALIF. PRIVATE UNIVERSITY/COLLEGE       0     0     0     0     0     0     0     0     0     0     0     0     0
                                           0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

OTHER CALIFORNIA SCHOOL                     4     0     4     0     0     4     0     0     2     2     0     2     2
                                          14.    0.   29.    0.    0.   33.    0.    0.   17.   25.    0.   25.   20.

U. S. A.  SCHOOL OUTSIDE OF CALIFORNIA      4     0     4     0     0     4     0     0     0     4     2     2     0
                                          14.    0.   29.    0.    0.   33.    0.    0.    0.   50.   20.   25.    0.

FOREIGN SCHOOL                              0     0     0     0     0     0     0     0     0     0     0     0     0
                                           0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

NA TO Q. 3 (IF ATTENDING SCHOOL)            0     0     0     0     0     0     0     0     0     0     0     0     0
                                           0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.
```

Display 6(c)
Listing of Total Respondent Data from Questionnaire*
(Output of Table Generation Program)

*Percentages may be applied to entire class

```
CAL HIGH 1974 CLASS  TABLE NO.    4     Q.4 WHAT IS YOUR MAJOR SUBJECT?
                                        BASE = IN SCHOOL MAIL

                                            ----SEX---- --ETHNIC BACKGROUND---- --H.S. PROGRAM--- ------G.P.A.-----
                                                  FE-             SPAN.         COLL.       VOC.
                                        TOTAL MALE  MALE  BLACK CAUC. NAME  OTHER PREP. GEN'L PREP. 0-1.9 2-2.9 3-4.0
                                        ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----

                  TOTAL                    14     7     7     6     2     6     0     4     6     4     5     4     5
                  PERCENT                100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.  100.


SOCIAL SCIENCES-SOC./PSYCH/POLI SCI.        0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

PHYSICAL SCIENCES-PHYSICS/CHEM/MATH         0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

BIOLOGICAL SCIENCES-BIOL/PRE MED-DENT       0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

EDUCATION/PHYS.ED./SCHOOL ADMINISTRATN      0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

ENGINEERING                                 0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

ENGLISH/HUMANITIES/LITERATURE/FOR.LANG.     0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

ART/MUSIC/ACTING/THEATRE ARTS               0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

BUSINESS/LAW                                0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

POLICE SCIENCE/FIRE SCIENCE/FORESTRY        0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

OTHER MAJOR                                 0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

NO MAJOR                                    0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

NA TO Q.4 (IF ATTENDING SCHOOL)             0     0     0     0     0     0     0     0     0     0     0     0     0
                                          0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.    0.

  /FINI
  /LOAD,LISTR
```

Display 6(d)
Listing of Total Respondent Data from Questionnaire*
(Output of Table Generation Program)

---

* Percentages may be applied to entire class.

```
                       VOCATIONAL PROGRAM IDENTIFICATION

                                                               -NO.COMPLETING- --LEFT EARLY---
DISTRICT  VOCATIONAL                                           ----PROGRAM---- --WITH SKILLS--
 CODE    PROGRAM CODE VOCATIONAL PROGRAM TITLE                  MALES  FEMALES  MALES  FEMALES
-------- ------------ ----------------------------------------- ------- ------- ------- -------

   01     07/0303/00  NURSING ASSISTANCE (AIDE)                    40       80       2       10
   02     17/0399/00  AUTOMOTIVE SERVICES                         100       30      15        4
   03     17/0999/00  COMMERCIAL PHOTOGRAPHY OCCUPATIONS          500      300      24       18
   04     17/1300/00  DRAFTING                                    300      200       6        1
   05     17/9900/00  TRADE AND INDUSTRIAL OCCUPATIONS            100      100       7       11
```

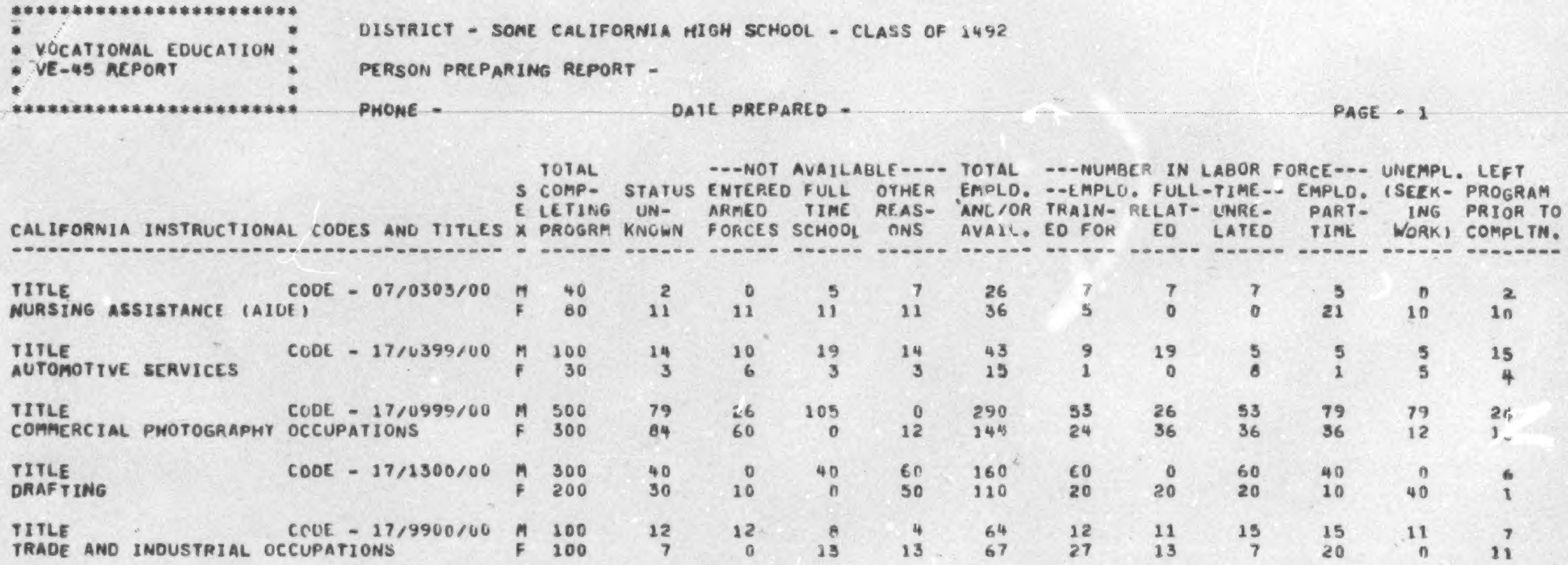
Display 7
Example Listing of Vocational Program Identification
(Output of Vocational Coordinator Listing Program)

```
                   VOCATIONAL GRADS WHO ARE WORKING FULL-TIME OR TOOK MORE THAN 1 VOC.PROG.

SCHOOL GRADUATE        DISTRICT VOCATIONAL   GRADUATE   VOC.PROG./JOB    JOB TITLE (IF WORKING)              YOUR JUDGEMENT
NUMBER NAME/NO.  SEX      PROGRAM CODES       STATUS     RELATEDNESS     MAJOR (IF IN SCHOOL FULL-TIME)      OF RELATEDNESS
------ -------- ----- ------------------- ------------ ------------- ------------------------------------ --------------

       HARVEY WALLBANGER
  011     001     1       01 02 03 04 05  WORKING.F.T.   SPECIFIC    AUTO MECHANIC
       JULIET JONES
  011     002     2       05 04           WORKING.F.T.   UNRELATED   WAITRESS
       ALBERT EINSTEIN
  011     004     1       03 02 05        SCHOOL.F.T.                ASTROPHYSICS
       CINDERELLA
  011     005     2       03 01           WORKING.P.T.               DENTAL ASSISTANT TRAINEE
       DUDLY DOGOOD
  011     006     1       03              WORKING.F.T.   RELATED     PROOF SALESMAN
```

Display 8
Example Listing of Graduates Working Full Time or in Multiple Programs
(output of Vocational Coordinator Listing Program)



```
*************************
*                       *     DISTRICT - SOME CALIFORNIA HIGH SCHOOL - CLASS OF 1492
* VOCATIONAL EDUCATION  *
* VE-45 REPORT          *     PERSON PREPARING REPORT -
*                       *
*************************     PHONE -                    DATE PREPARED -                       PAGE - 1

                                            TOTAL           ---NOT AVAILABLE---- TOTAL  ---NUMBER IN LABOR FORCE--- UNEMPL. LEFT
                                          S COMP-  STATUS ENTERED FULL  OTHER  EMPLD. --EMPLD. FULL-TIME-- EMPLD. (SEEK- PROGRAM
                                          E LETING  UN-   ARMED   TIME  REAS-  AND/OR TRAIN- RELAT- UNRE-   PART-   ING  PRIOR TO
CALIFORNIA INSTRUCTIONAL CODES AND TITLES X PROGRM KNOWN  FORCES SCHOOL  ONS   AVAIL. ED FOR   ED   LATED   TIME  WORK) COMPLTN.
----------------------------------------- - ------ ------ ------ ------ ------ ------ ------ ------ ------ ------ ------ --------

TITLE                CODE - 07/0303/00    M   40      2      0      5      7     26      7      7      7      5      0      2
NURSING ASSISTANCE (AIDE)                 F   80     11     11     11     11     36      5      0      0     21     10     10

TITLE                CODE - 17/0399/00    M  100     14     10     19     14     43      9     19      5      5      5     15
AUTOMOTIVE SERVICES                       F   30      3      6      3      3     15      1      0      8      1      5      4

TITLE                CODE - 17/0999/00    M  500     79     26    105      0    290     53     26     53     79     79     26
COMMERCIAL PHOTOGRAPHY OCCUPATIONS        F  300     84     60      0     12    144     24     36     36     36     12     1[illegible]

TITLE                CODE - 17/1300/00    M  300     40      0     40     60    160     60      0     60     40      0      6
DRAFTING                                  F  200     30     10      0     50    110     20     20     20     10     40      1

TITLE                CODE - 17/9900/00    M  100     12     12      8      4     64     12     11     15     15     11      7
TRADE AND INDUSTRIAL OCCUPATIONS          F  100      7      0     13     13     67     27     13      7     20      0     11
```

Display 9

Example VE-45 Report

VI

REPRODUCIBLE MATERIALS

1. Reproduce the following forms in the numbers indicated. Refer to the chart on Page 174 for approximate sample sizes. White out page numbers on each form before copying.

Graduate Roster: Enough forms for graduating class (4 names per page)

Example: 500 graduating students = 125 pages

Graduate Follow-up Questionnaire: Double the sample size (number on master name list). You will probably use less than the number indicated. Retain the rest for next year.

Example: 122 names in sample = 244 forms (122 per mailout)

Graduate Telephone Questionnaire: 1/2 the number of the sample. You will probably use less than the number indicated. Retain the rest for next year.

Example: 122 names in sample = 61 forms

Telephone Interviewer Instructions and Script: 1 per interviewer

Example: 2 Interviewers = 2 forms

*First Cover Letter: 1 per name in sample

Example: 122 names in sample = 122 forms

Note: Type master on Page 182 inserting appropriate dates, contact person's name and phone number. Reproduce copies on school letter head.

*Second Cover Letter: 3/4 the number of the first cover letter

Example: 122 First Cover Letters = 93 forms

Note: Type master on Page 183 inserting appropriate dates. Reproduce copies on school letter head.

Keypunch Sheets for Table Generation - Total Class (Cards 1 & 2): Double the sample size

Keypunch Sheets for Vocational Program Identification Cards: One and one-half times the number of vocational programs in district.

Example: 10 vocational programs - 15 sheets

Keypunch Sheet for Vocational Coordinator Listing and VE-45 Report Programs: One and one-half times the number of vocational graduates in district.

Example: 100 vocational graduates = 150 sheets

2. In addition to the materials to be reproduced you will need the following materials to conduct the survey.

Master Name List: A computer print-out of all the students in the sample. Use it to maintain a record of respondents and non-respondents to the questionnaires.

Mailing Labels and Questionnaire Labels: Supplied with the master name list by the data processing facility. Four labels are needed for each name on the list.

*Mailing Envelopes: No. 10 size; twice the number in the sample.

Example: 122 names in sample = 244 Envelopes

Business Reply Envelopes: No. 9 size; imprinted with the name of the school. Same number as mailing envelopes.

Example: 244 mailing envelopes = 244 business reply envelopes

---

*Cover letters must be produced on school stationary and appropriate information entered.

FIGURE O

APPROXIMATE SAMPLE SIZES BY GRADUATING CLASS SIZE

Graduating Class Size	Approximate Sample Size
150-199	77-88
200-249	88-96
250-299	96-103
300-349	103-108
350-399	108-112
400-449	112-116
450-499	116-119
500-549	119-122
550-599	122-129
600-649	129-131
650-699	131-139
700-749	139-147
750-799	147-163
800-849	163-172
850-899	172-183
900-949	183-194
950-999	194-196
1000	196

GRADUATE ROSTER

School
District
Page of

Grad's name
Grad no. | Sex | Eth. | GPA | Yrs.
Program(s)
Address
City
State CA
Zip code
Phone no. ( )
Parent's name

Grad's name
Grad no. | Sex | Eth. | GPA | Yrs.
Program(s)
Address
City
State CA
Zip code
Phone no. ( )
Parent's name

Grad's name
Grad no. | Sex | Eth. | GPA | Yrs.
Program(s)
Address
City
State CA
Zip code
Phone no. ( )
Parent's name

Grad's name
Grad no. | Sex | Eth. | GPA | Yrs.
Program(s)
Address
City
State CA
Zip code
Phone no. ( )
Parent's name

CODES

SEX	ETHNIC	GPA	YEARS	PROGRAM
Male - 1	Black - 1	0.0 - 1.9 - 1	1 or less	College Prep - 1
Female - 2	Caucasian - 2	2.0 - 2.9 - 2	2	General - 2
	Oriental - 3	3.0 - 4.0 - 3	3	Vocational - 3+ code number
	Spanish Surname - 4		4	
	Other - 5			

GRADUATE FOLLOW-UP QUESTIONNAIRE

IF THE INFORMATION ON THE LABEL AT THE LEFT IS INCORRECT, PLEASE ENTER THE CORRECT INFORMATION AT THE RIGHT

NAME ______________________________
last first middle

PERMANENT ADDRESS ______________________________
no. street city

______________________________ PHONE ______________________________
state zip area code/number

PLEASE FOLLOW INSTRUCTIONS CAREFULLY AND ANSWER ALL QUESTIONS THAT APPLY TO YOU.

1. What are you doing at the present time? (Check each item that describes your present activity.)

☐ In school, full-time
☐ In school, part-time

☐ In armed forces
☐ Housewife

☐ Working, full-time
☐ Working, part-time

☐ Not working, looking for a job
☐ Not working, not looking for a job

☐ Other (please describe) ______________________________

ANSWER THE QUESTIONS IN THIS BOX IF YOU ARE ATTENDING SCHOOL FULL-TIME OR PART-TIME.

2. What type of school are you attending?

☐ Four-year college or university
☐ Technical school (type) ____________
☐ Trade school (type) ____________
☐ Private business school

☐ Other (DESCRIBE) ____________

☐ Junior college (also check one below)
- ☐ Plan transfer to 4-year college
- ☐ Two-year AA program only
- ☐ Certificate program (DESCRIBE) ____________
- ☐ Other (DESCRIBE) ____________

3. What is the name of the school? ______________________________

4. What is your major subject? ______________________________ ☐ None

ANSWER THE QUESTIONS IN THIS BOX IF YOU ARE WORKING FULL-TIME OR PART-TIME OR IF YOU ARE LOOKING FOR A JOB.

5. Which of the following is your present job situation?

☐ Unemployed, but looking for a job
☐ In an apprenticeship program
☐ Receiving on-the-job training
☐ In a job I am fully qualified for

6. Which *single* statement best describes your present job or, if unemployed, the job you are looking for?

☐ In a field for which I received specific high school training
☐ In a field related to my high school training
☐ In a field unrelated to my high school training

ANSWER THE QUESTIONS IN THIS BOX IF YOU ARE WORKING FULL-TIME OR PART-TIME.

7. What type of business or industry are you employed in? ____________________

____

8. What is your job title? ______________________________

9. How far from your high school is your place of employment?

☐ 0-10 miles
☐ 11-25 miles
☐ 26-50 miles
☐ 51-100 miles
☐ more than 100 miles

10. Who helped you get your job?

☐ Parents, relatives, or friends
☐ High school vocational counselor
☐ Got it on my own
☐ Private employment agency
☐ State or public employment agency
☐ Other (DESCRIBE) ____________________

11. Make an "X" in the box that best describes your agreement or disagreement with the statement for your present job.

STRONGLY DISAGREE	DISAGREE	NOT SURE/ UNDECIDED	AGREE	STRONGLY AGREE	
☐	☐	☐	☐	☐	The work is interesting to me.
☐	☐	☐	☐	☐	My chances for advancement are good.
☐	☐	☐	☐	☐	The pay is good, considering my training and experience.
☐	☐	☐	☐	☐	I am satisfied with this job, at this stage in my career.
☐	☐	☐	☐	☐	The job is related to my ultimate occupational objective.

PLEASE ANSWER ALL OF THE FOLLOWING QUESTIONS

12. Read the following list of high school subject areas. Then make an "X" in each set of columns according to the instruction at the top of the sets.

		Did you take any courses in this area?		If "yes," check the degree of usefulness of courses you have taken to your present activity			Check here if you wish you had taken any OR more courses in this area
[NUMBER]	SUBJECT AREAS	no	yes	not useful	somewhat useful	very useful	
[1]	Art, Music	☐	☐	☐	☐	☐	☐
[2]	Drama, Speech	☐	☐	☐	☐	☐	☐
[3]	English, Literature, Writing	☐	☐	☐	☐	☐	☐
[4]	Foreign Language	☐	☐	☐	☐	☐	☐
[5]	Mathematics	☐	☐	☐	☐	☐	☐
[6]	Science	☐	☐	☐	☐	☐	☐
[7]	Social Studies	☐	☐	☐	☐	☐	☐
[8]	Agricul., Horticul., Forestry	☐	☐	☐	☐	☐	☐
[9]	Business and Office Practices	☐	☐	☐	☐	☐	☐
[10]	Distrib. Ed., Merch'dsing, Sales	☐	☐	☐	☐	☐	☐
[11]	Health, Medical, Hospital	☐	☐	☐	☐	☐	☐
[12]	Home Ec., Consumer Ed.	☐	☐	☐	☐	☐	☐
[13]	Indust., Tech., and Trade Skills	☐	☐	☐	☐	☐	☐
[14]	Work Experience Program	☐	☐	☐	☐	☐	☐
[15]	Physical Education	☐	☐	☐	☐	☐	☐

13. In your present activity (school, work etc.), what *specific* high school *courses* (for example, typing, biology, drafting, etc.) do you find to be

Most useful (NAME) ________________________ [ ]
Second most useful (NAME) ________________________ [ ]
Third most useful (NAME) ________________________ [ ]

Write the numbers (used in Question 12) of the subject areas in which the specific courses were given.

14. Are there any *specific courses* or *work experience programs* that you now either wish you had taken or wish had been offered in high school?

☐ Yes (please describe) ________________________
☐ No

15. What educational program would you take now if you had it to do over again?

☐ Same program I took
☐ A different program (also check one below)
  ☐ College preparatory
  ☐ Vocational program (which one?) ________________________
  ☐ Other (describe) ________________________

16. What was your occupational choice when you were in high school? ________________________

☐ Had not made a choice.

17. What is your occupational choice now? ________________________

☐ Have not made a choice.

18. Who helped you *most* in planning for the future when you were in high school? Check one.

☐ Parents and relatives
☐ On-campus friends
☐ Off-campus friends
☐ School counselors
☐ Teachers
☐ Work experience advisor

☐ Others (Please describe) ________________________

19. Were you a member of any high school teams, clubs, or organizations?
☐ Yes ☐ No If yes, for each group you were a member of, indicate whether or not you now feel it was worth your time.

Yes	No		Yes	No	
☐	☐	Student government	☐	☐	Vocational Clubs
☐	☐	Athletic teams	☐	☐	Music, Acting groups
☐	☐	Scholastic Clubs	☐	☐	Cheerleader, Drill team
☐	☐	Publications	☐	☐	Other (DESCRIBE) ________

20. In your opinion, how helpful was high school to you in learning or improving the skills used in the following everyday-living activities?

Not Helpful	Somewhat Helpful	Very Helpful	
☐	☐	☐	Reading for instruction and pleasure
☐	☐	☐	Writing letters, reports, or notes accurately
☐	☐	☐	Working numerical problems and managing finances
☐	☐	☐	Speaking before groups of people
☐	☐	☐	Preparing for marriage and family life
☐	☐	☐	Getting and maintaining a job
☐	☐	☐	Using proper spoken English
☐	☐	☐	Thinking out problems, issues, and forming opinions

21. Make an "X" in the box that best describes your agreement or disagreement with the following statements.

STRONGLY DISAGREE	DISAGREE	NOT SURE/ UNDECIDED	AGREE	STRONGLY AGREE	
☐	☐	☐	☐	☐	My counselor gave me good information in planning my high school program.
☐	☐	☐	☐	☐	My counselor was helpful in planning my activity after graduation.
☐	☐	☐	☐	☐	Most of my teachers made their courses interesting and enjoyable.
☐	☐	☐	☐	☐	Most of my teachers tried to meet my specific educational needs.
☐	☐	☐	☐	☐	Most of my teachers related their subjects to the needs of today.
☐	☐	☐	☐	☐	Most of my teachers were *not* prejudiced toward minority group students.
☐	☐	☐	☐	☐	I feel that high school was a pleasant and rewarding experience.

Thank you for completing the questionnaire

Feel free to write comments in the empty space above

GRADUATE TELEPHONE INTERVIEW

Graduate's Name____________________________ Interviewer's Initials__________

Graduate's I.D. No.__________________ Date______________________

ASK ALL GRADUATES THE QUESTION IN THIS BOX.

1. WHAT ARE YOU DOING AT THE PRESENT TIME? (Check each response that describes his activity. Ask italized major category first; if answer is "yes," then ask sub-category.)

In School — ☐ Full Time / ☐ Part Time

Working — ☐ Full Time / ☐ Part Time

In Armed Services ☐

Not Working — ☐ Looking for a job / ☐ Not looking for a job

Housewife ☐

Other (Describe)____________________________

ASK QUESTIONS IN THIS BOX ONLY IF GRADUATE IS ATTENDING SCHOOL *PART TIME* OR *FULL TIME*.

2. WHAT TYPE OF SCHOOL ARE YOU ATTENDING? (Read out all the choices; after determining school type, ask name of school and write in next to school type.)

☐ Four-year college or university____________________

☐ Technical school____________________

☐ Trade school____________________

☐ Private business school____________________

☐ Junior college____________________

☐ Other____________________

ASK QUESTIONS IN THIS BOX ONLY IF GRADUATE IS WORKING *FULL TIME* OR *PART TIME*.

3. WHAT TYPE OF BUSINESS OR INDUSTRY ARE YOU EMPLOYED IN?____________________

____

4. WHAT IS YOUR JOB TITLE?____________________________

5. WHICH SINGLE STATEMENT BEST DESCRIBES YOUR JOB? (Read choices and check the response.)

☐ In a field for which you received specific training in high school.

☐ In a field related to your high school training.

☐ In a field unrelated to your high school training.

6. HOW FAR FROM YOUR HIGH SCHOOL IS YOUR PLACE OF EMPLOYMENT? (Check the appropriate answer).

☐ 00-10 miles

☐ 11-25 miles

☐ 26-50 miles

☐ 51-100 miles

☐ More than 100 miles

INDICATE WHO THE RESPONDENT WAS ☐ graduate ☐ brother or sister

☐ parent ☐ other (specify)____________

THANK THE RESPONDENT FOR HIS COOPERATION AND ALSO ASK THAT THE QUESTIONNAIRE BE COMPLETED AND RETURNED AS SOON AS POSSIBLE.

INTERVIEWER SCRIPT

Hello, this is ____________________________ calling for ______________ High School. May I speak with (graduate's name)_________________________?

I. IF GRADUATE IS AVAILABLE:

A. Introduce yourself if the graduate did not answer the phone originally, then continue as follows: "You may recall receiving a questionnaire within the last month regarding your high school education and experiences. We haven't received it back, and I wonder if you would be so kind as to give me some information over the phone. It will take only a few minutes. Thank you."

Proceed with Interview.

At end of Interview, thank the graduate and ask him to return the questionnaire as it contains other information we are interested in.

II IF GRADUATE IS UNAVAILABLE:

A. Determine with whom you are speaking. If it is a relative or someone who knows the graduate well, continue as follows:

"Perhaps you might be able to help me. Several weeks ago, we sent (Graduate's Name) a questionnaire concerning (His or Her) high school education and experiences. We are trying to find out what recent graduates feel was good and bad about their high school now that they're graduated and have had a chance to evaluate their education. With the information we get from the graduates we hope to correct the problems so that present and future students will receive a better education. We haven't received (Graduate's Name) questionnaire back yet, and I wonder if you would be so kind as to provide me with some of the information we are seeking. It will take only a few minutes.

IF THE PARTY IS COOPERATIVE:

"Thank you." (Proceed with the Interview. Also thank at end of Interview and ask the party to remind the graduate to return the questionnaire, because it contains some other items we are interested in obtaining information about.)

IF THE PARTY IS NOT COOPERATIVE:

"Can you tell me when (Graduate's Name) will be home so that I can speak with him (her)? Thank you."

(Note the time on your name list and call back then.)

(FIRST COVER LETTER)

Dear Graduate:

It is obvious to everyone who has gone through high school that the schools are not perfect places. Many things perhaps need to be changed and improved. Now that you have been out of school for awhile, you have probably given some thought to how your high school education and experiences have helped you or how they could have helped you more had they been different.

We are conducting a follow-up study to determine what recent graduates think of their high school education and experiences and what aspects of their school they feel need to be changed and improved. Enclosed is a questionnaire that is being sent to a representative group of 197_ graduates. Your responses and opinions are particularly important because you represent about five members of your graduating class; not all of your former classmates are being sent the questionnaire.

The information we receive will help us to evaluate and improve our educational and guidance programs for current and future students, some of whom may be your friends or members of your family. We would appreciate honest responses, and we welcome letters since often they tell us things that cannot be expressed in a questionnaire. They will, of course, be kept strictly confidential. Please return the questionnaire in the enclosed envelope before (date of 10th day after mail-out).

If you have any questions about the study, please call ____________ (school contact person) ________ at (phone number) ____, extension no.________. We hope that you will participate in the study and that this letter finds you well. Best wishes and good luck in your future activities.

Sincerely,

Principal

Enc.

(SECOND COVER LETTER)

Dear Graduate:

Two weeks ago we sent you a copy of our high school follow-up questionnaire and requested your cooperation in completing and returning it to us. You may remember from our letter that the questionnaire was being sent to a representative group of the 197_ graduates to enable us to obtain information that will be used to evaluate and improve our high school instructional and guidance programs.

We have not yet received your completed questionnaire, and have enclosed another in case the first was lost or thrown away. Not all the 197_ graduates were sent a questionnaire; the fact that we have sent you a second copy of it should indicate the importance of your opinions to us. Please take a few minutes of your time to complete and return it now.

We have every intention of using the information you provide to improv your former school, perhaps for the benefit of people you know or are related to. Completing the questionnaire will not be a waste of time. But before anything can be done, we must have your help.

Thank you for your cooperation.

Sincerely,

Principal

Enc.

KEYPUNCH SHEET FOR TABLE GENERATION - TOTAL CLASS CARD 1

	Col.	
School I.D.	1- 2- 3-	
Graduate I.D.	4- 5- 6-	
Card No.	7-	1
Survey Data Source	8-	
Sex	9-	
Ethnic Background	10-	
High School Program	11-	
G.P.A.	12-	
Q1-What Presently Doing?	13- 14- 15- 16- 17-	
Q2-Type School Attending	18-	
Junior College Plan	19-	
Q3-Name of School	20-	
Q4-Major Subjects	21- 22-	
Q5-Present Job Situation	23-	
Q6-Stat. Describing Job	24-	
Q7-Industry	25- 26-	
Q8-Job Title/Occupation	27- 28-	
Q9-Distance From High School	29-	
Q10-Who Helped Get Job	30-	
Q11-Statmts. About Work		
a) Work is interesting	31-	
b) Advancement Chances Good	32-	
c) Pay is Good	33-	
d) Satisfied With Job	34-	
e) Related to Occ. Objective	35-	

	Col.	
Q12-High School Courses (1) Art/Music	36- 37- 38-	
(2) Drama/Speech	39- 40- 41-	
(3) English/Literature/Writing	42- 43- 44-	
(4) Foreign Language	45- 46- 47-	
(5) Mathematics	48- 49- 50-	
(6) Science	51- 52- 53-	
(7) Social Studies	54- 55- 56-	
(8) Agriculture/Hort./Forestry	57- 58- 59-	
(9) Business/Office Practice	60- 61- 62-	
(10) Distribution Edu./Merchandising/Sales	63- 64- 65-	
(11) Health/Medical/Hosp.	66- 67- 68-	
(12) Home Ec./Consumer Ed.	69- 70- 71-	
(13) Ind./Tech./Trade Skills	72- 73- 74-	
(14) Work Experience	75- 76- 77-	
(15) Physical Education	78- 79- 80-	

KEYPUNCH SHEET FOR TABLE GENERATION - TOTAL CLASS CARD 2

	Col.	
School I.D.	1-	
	2-	
	3-	
Graduate I.D.	4-	
	5-	
	6-	
Card No.	7-	2
Survey Data Source	8-	
Q13-Most Useful Subject	9-	
	10-	
Q13-Second Most Useful Subject	11-	
	12-	
Q13-Third Most Useful	13-	
	14-	
Q14-Courses Wish Had Taken	15-	
	16-	
Q15-Education Program	17-	
Which Type H.S. Program	18-	
Which Type Voc. Program	19-	
	20-	
Q16-Occ. Choice in H.S.	21-	
	22-	
Q17-Occ. Choice H.S.	23-	
	24-	
Made Choice in H.S.	25-	
Same/Different Choice Now	26-	
Had Not Made Choice in H.S.	27-	
Made Choice Since Then?	28-	
Q18-Who Helped Plan for Future	29-	
	30-	
Q19-Any Organization Membership	31-	
Student Government	32-	
	33-	
Athletic Teams	34-	
	35-	
Scholastic Club	36-	
	37-	

	Col.	
Publications	38-	
	39-	
Vocational Club	40-	
	41-	
Music/Acting	42-	
	43-	
Cheerleader/Drill team	44-	
	45-	
Other Organization	46-	
	47-	
Q20-Helpfulness Reading	48-	
Writing	49-	
Numerical Problems	50-	
Speaking	51-	
Marriage/Family	52-	
Getting a Job	53-	
Proper English	54-	
Thinking Out Problems	55-	
Q21-Descriptive Statements Counselor H.S. Program	56-	
Counselor Plans After Grad	57-	
Teachers Made Classes Interesting	58-	
Teachers Met Needs	59-	
Teachers Related to Today	60-	
Teachers Not Prejudiced	61-	
H.S. Rewarding Experience	62-	

Spares

63		72	
64		73	
65		74	
66		75	
67		76	
68		77	
69		78	
70		79	
71		80	

Keypunch Sheet for Vocational Program Identification Cards

	Col.		
District Code	1-		
	2-		
	3-	b	blank
State Code	4-		
	5-		
	6-	/	slash
	7-		
	8-		
	9-		
	10-		
	11-	/	slash
	12-		
	13-		
	14-		
Prog. Title	15-55-		
	56-	b	
Males Comp.	57-		
	58-		
	59-		
	60-		
	61-	b	
Females Comp.	62-		
	63-		
	64-		
	65-		
	66-	b	
Males Leaving	67-		
	68-		
	69-		
	70-		
	71-	b	
Females Leaving	72-		
	73-		
	74-		
	75-		

Keypunch Sheet for Vocational Coordinator Listing and VE-45 Report Programs

First Card	Col.	
School ID	1-	
	2-	
	3-	
Grad. ID	4-	
	5-	
	6-	
Card No.	7-	1
	8-	b blank
Sex	9-	
Dist. Codes	10-	
	11-	
	12-	
	13-	
	14-	
	15-	
	16-	
	17-	
	18-	
	19-	
Final Dist. Code	20-	
	21-	
Grad. Status	22-	
Job Descrp.	23-60-	
College Major	61-80-	

Second Card	Col.	
School ID	1-	
	2-	
	3-	
Grad. ID	4-	
	5-	
	6-	
Card No.	7-	2
	8-13-	b
Grad. Name	14-40	

(Card 2 is used only for the Vocational Coordinator Listing Program and is completed only for vocational graduates with multiple programs or working full-time or both.)

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